





Wechat: Keytechnology

Email: sales01@key-tek.cn, sales05@key-tek.cn Telephone: +86-755-89230460, +86-755-89253893

Webpage: www.rugged-key.com, www.rugged-system.com

Head Office Add: B702, Building 1, Tian'an Cyber Park, HuangGe North Rd, Long Gang District, ShenZhen, P.R. China. Zip Code: 518172
Factory Add: Floor 7, Building S8, Fenggang Tianan Cyber Park, No. 208 Fenggang Section, Dongshen Road, Fenggang Town, DongGuan City, Guang Dong Province, P.R. China. Zip Code: 523703
Beijing Office Add: 1205, Floor 12, Building 7, No. 26 Chengtong Street, Shijingshan District, Beijing, P.R. China. Zip Code: 100043

RUGGED KEYBOARD AND MOUSE CATALOGUE

Rugged Keyboards and Mice Expert



Company Profile

Established in 2006, Key Technology China Limited is an ISO9001-2015 and GJB9001C-2017 registered enterprise engaged in research, development, sale and service of all kinds of rugged keyboards/pointing devices for harsh environments covering industrial/military/marine/medical/coal and mine/oil and gas/chemical industry/transportation/finance/aerospace/public access/food and beverage/vehicle etc. applications. We have excellent and experienced teams who focus on product development & design, quality control and company running, dedicated to strict quality control and thoughtful customer service, our experienced staff are always available to provide ideal solutions to customers. Besides, our products have obtained many professional certificates/testing reports including but not limited to CE, RoHS, FCC, ESD, REACH, IEC60945-2002, MIL-STD-461G-EMC-EMI-EMS-ESD, MIL-STD-810F, IP67, IP68, Medical, Explosive-proof, high and low temperature testing as well as patent certificates.



CONTENTS

01

Rugged Silicone Rubber Keyboard

02

Rugged Chiclet Keyboard





Feature and Reliability

EMC SPEC	MIL-STD-461G (EMC, EMI, EMS, ESD)
01	CE101 25Hz - 10kHz Conducted Emissions, Audio Frequency Currents, Power leads
02	CE102 10kHz -10MHz Conducted Emissions, Radio Frequency Potentials, Power leads
03	CS101 25Hz - 150kHz Conducted Susceptibility, Power Leads
04	CS106 Conducted Susceptibility, Transients, Power Leads
05	CS112 Electrostatic Discharge Susceptibility
06	CS114 4kHz -400MHz Conducted Susceptibility, Bulk Cable injection
07	CS115 Conducted Susceptibility, Bulk Cable injection, Impulse Excitation
08	CS116 10kHz - 100MHz Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads
09	RE101 25Hz -100kHz Radiated Emissions, Magnetic Field
1 0	RE102 10kHz - 18GHz Radiated Emissions, Electric Field
1 1	RS101 25HZ - 100kHz Radiated Susceptibility, Magnetic Field
12	RS103 10kHz - 40GHz Radiated Susceptibility, Electric Field

Environmental Adaptability	MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, fungus etc.)
01	Low Pressure (57kPa - 106kPa)
02	High Temperature (+75°C)
03	Low Temperature (-40 °C)
04	Temperature Shock (-55°C to +75°C)
05	Rain Test (Wind velocity: no less than 18m/s, test duration: 3h)
06	Humidity (-30 $^{\circ}$ C to +60 $^{\circ}$ C, 95%RH)
07	Fungus (Test period: 28 days (672h))
08	Salt Spray (Test period: 96h, IEC60512-6)
09	Low Frequency Vibration
1 0	Dust Test (10.6g/m³±7g/m³)
1 1	Vibration (Frequence: 0-2000Hz, Displacement: 1mm, Acceleration:70m/s²)
1 2	Shock (40g, 11ms)
1 3	Drop Test (Drop height: 122cm)

Designed to meet the critical military standards in these 10 aspects: Reliability, Safety, Maintainability, Testability, Supportability, Environmental adaptability, Stability, Compatibility, Consistency, and Continuity.



Feature

IP65 dynamic sealed and ruggedized silicone rubber military keyboard with a Force Sensing Resistor pointing device for fast and accurate cursor position, compact format, 8 FN keys (F1, F2...F7, F8) are on top line for easy operation, with carbon-ongold key switch technology with key stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes. Military level. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock,rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	76+3 keys
Key Travel::	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Gross Weight:	≈0.50KG
Dimension:	207.0mm x 166.5mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

i i	461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, bration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



IP65 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough touch pad forfast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, the overall key layout is compact, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fastand accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounting, with adjustable backlight included. FN+CLEAN combination key tolock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer, sealed and ruggedized with top rubber for top panel mounting. Meet the military requirements of strong antiinterference, stability, and low radiation etc. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.20KG
Dimension:	283.0mm x 177.7mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP68 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough touch pad forfast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, the overall key layout is compact, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, flat movable desk top solution with VESA mounting holes on backside, with adjustable red backlight included. FN+CLEAN combination key to lock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.50KG
Dimension:	283.0mm x 177.7mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 $\blacksquare 03$ 04





IP65 dynamic sealed and durable embedded silicone rubber military keyboard with a Force Sensing Resistor pointing device for fast and accurate cursor position, with built-in military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounted solution with aluminum alloy back plate and threaded bolts, white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M282-DHP-FN-BL-NV-151B-JC

Feature `

IP65 dynamic sealed and durable embedded silicone rubber military keyboard with a Force Sensing Resistor pointing device for fast and accurate cursor position, with built-in military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounting with threaded mounting holes, white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	90 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	281.0mm x 152.5mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	89 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	282.4mm x 153.6mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed and ruggedized silicone rubber military keyboard with a Force Sensing Resistor pointing device for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with key stroke (1.20mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounting, with red backlight included. Military level. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Feature

IP65 sealed & ruggedized silicone rubber military keyboard, 12 function keys on top line for easy operation, military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mount solution, adjustable white/red backlight included. Military level.

Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+3 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Gross Weight:	≈0.70KG
Dimension:	282.4mm x 153.6mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

The state of the s	461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, pration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	89 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.60KG
Dimension:	284.0mm x 109.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 sealed & ruggedized silicone rubber military keyboard with a separate military-grade wide temperature touchpad with 400DPI resolutions for fast cursor position, as well as independent left and right mouse buttons with 3 LEDs, 12 function keys on top line for easy operation, military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mount solution, adjustable white/red backlight included. Military level. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD -810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	Keyboard:284.0mm x 109.0mm(L x W); Touchpad:65.0mm x 49.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature `

IP68 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough touch pad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, the overall key layout is compact, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN+CLEAN combination key to lock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer, inclined mountable desk top version with VESA mounting holes on backside, white backlight included (red/green/blue optional). Military level. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD -810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

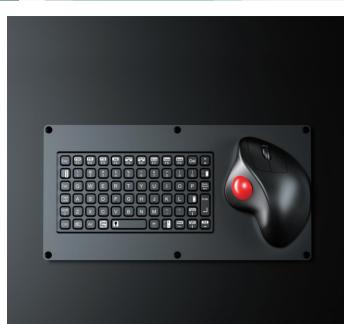
Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.80KG
Dimension:	312.0mm x 215.1mm x 27.7mm~46.1mm(L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Part Number: K-TEK-M316-OTB-151B-FN-ML

Feature \

IP65 dynamic sealed & ruggedized silicone rubber military keyboard integrated with a conventional mouse with middle wheel, left/right buttons as well as one IPX6 rating 34mm optical trackball mouse at 800 DPI resolution for fast cursor moving, with 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise or mistyping, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, CNC aluminum housing electroplated with black titanium for full black color treatment to be scratch proof, with sinking holes for panel mount to user's device. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Feature `

IP65 dynamic sealed and ruggedized silicone rubber millitary keyboard with matrix FPC flex cable, with carbon-on-gold key switch technology with key stroke (1.20mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounted with top ruggedized industrial silicone cover & military matrix PCB for ruggedized structure and easy mounting and sealing, adjustable white backlight included. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	69 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	316.0mm x 160.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈100mA
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	108+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.20KG
Dimension:	317.0mm x 170.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard, with built-in military grade PCB,12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti--microbial keyboard surface withstand to most chemicals and liquids under harsh environment, with FN + Lock key to lock the whole keyboard and FN + space key to lock the touchpad for easy cleaning without needing to take away the keyboard from PC, with combined multimedia functions on F1-F12 keys for convenient and easy operation, rear panel mounted, with a reinforced and rugged metal back plate for better shielding function and positioning of the rugged cable outlet, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	110 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	349.0mm x 145.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature `

IP68 dynamic sealed & ruggedized silicone rubber military keyboard with sealed tough touchpad for fast cursor position, with 2 extra mouse buttons for left and right clicking, 12 function keys on top line for easy operation, with carbon-ongold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, desk top version with stainless steel metal housing or rear panel mount solution wtih mounting holes along the edges of stainless steel back plate, adjustable white or red backlight included. FN + bulb button to control keyboard backlight on or off. Military level. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.80KG
Dimension:	400.0mm x 180.0mm x 21.5mm(L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 \blacksquare 13





IP67 dynamic sealed and durable embedded silicone rubber military keyboard with a Force Sensing Resistor pointing device for fast and accurate cursor position, with built-in military grade PCB, with 2 extra mouse buttons for left and right clicking, 12 function keys on top line for easy operation, with carbon-ongold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, desk top version with stainless steel metal housing or rear panel mount solution with mounting holes along the edges of stainless steel back plate, adjustable white backlight included. FN + bulb button to control keyboard backlight on or off. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.). Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M396TP-KP-FN-BL-EMC-151B

Feature `

IP65 dynamic sealed and ruggedized silicone rubber military keyboard with full keyboard functionalities with sealed and tough touchpad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with key stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key to lock/disable the keyboard for easy cleaning, gold finish PCB sealed and ruggedized with top rubber for top panel mounting, with backlight included (red/ white). Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	91 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈3.00KG
Dimension:	380.0mm x 160.0mm x 30.9mm(L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP67
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data `

Keys:	103+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	396.0mm x 146.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard, with built-in military grade PCB,12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti -microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, rear panel mounted, with a reinforced and rugged aluminum back plate for better shielding function and positioning of the rugged cable outlet, adjustable white backlight included. Designed to Meet MIL-STD-461G(EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M270-FN-BL-NV-151B+M73TP

Feature `

IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard integrated with sealed tough touchpad for fast cursor position, with built-in military grade PCB, 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti -microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.50KG
Dimension:	270.0mm x 113.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.60KG
Dimension:	Keyboard:270.0mm x 113.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 $\blacksquare 17$ 18





IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard integrated with sealed tough touchpad for fast cursor position, with built-in military grade PCB, 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti -microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.60KG
Dimension:	Keyboard:270.0mm x 113.0mm(L x W); Touchpad:65.0mm x 49.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability \

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard integrated with sealed tough touchpad for fast cursor position, with built-in military grade PCB, 12 function keys on top line for easy operation, with carbon-ongold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Patented keyboard (Patent number: ZL 2024 3 0193876.7)

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	315.0mm x 108.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 $\blacksquare 19$ 20





IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard, with built-in military grade PCB, with numeric keypad on the right side of keyboard and 12 function keys on top line for easy operation, carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, with a reinforced and rugged aluminum back plate for better shielding function and positioning of the rugged cable outlet, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	102 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.60KG
Dimension:	315.0mm x 108.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature '

IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard integrated with sealed tough touchpad for fast cursor position, with built-in military grade PCB, with numeric keypad on the right side of keyboard and 12 function keys on top line for easy operation, carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, with a reinforced and rugged aluminum back plate for better shielding function and positioning of the rugged cable outlet, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	102+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	Keyboard:315.0mm x 108.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability \

Storage Temperature:

APPLICATION:

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.) IP65 Protection Level: >20000H MTBF: MTTR: <30min -40°C ~ +75°C Operating Temperature: -45°C ~ +85°C

Vehicle, aerospace, naval, defense, maritime, Radar, console,

portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed & ruggedized silicone rubber military keyboard with sealed tough touchpad with 400DPI resolutions for fast cursor position, with numeric keypad on the right side of keyboard and 12 function keys on top line for easy operation, carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature. shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	102+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	Keyboard:315.0mm x 108.0mm(L x W); Touchpad:143.6mm x 116.6mm(L x W)

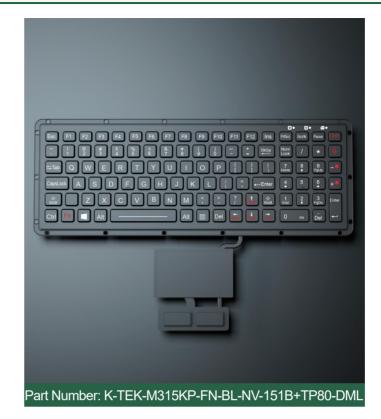
Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature.

low pressure, numidity, vibration, snock, temperature snock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature `

IP65 dynamic sealed & ruggedized silicone rubber military keyboard with sealed tough touchpad with 400DPI resolutions for fast cursor position, with numeric keypad on the right side of keyboard and 12 function keys on top line for easy operation, carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise and error output, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mount with super thin ruggedized aluminum back plate with mounting holes, adjustable white backlight included. Designed to Meet MIL-STD-461G (EMC, EMI. EMS. ESD) and MIL-STD-810F (wide temperature. shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	102+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	Keyboard:315.0mm x 108.0mm(L x W); Touchpad:80.0mm x 49.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)

low procedure, numerity, vibration, enough, temperature enough, runn, adet, runnyae, colai rudiation etc.	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed and durable embedded silicone rubber rugged keyboard integrated with sealed tough touchpad for fast cursor position, with built-in military grade PCB, 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, rear panel mounted, with a reinforced and rugged metal back plate for better shielding function and positioning of the rugged cable outlet, adjustable white backlight included. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	88 keys (including 2 mouse buttons)
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.90KG
Dimension:	386.0mm x 125.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature `

IP65 dynamic sealed and ruggedized silicone rubber military keyboard with full keyboard functionalities with sealed and tough touchpad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with key stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key to lock/disable the keyboard for easy cleaning without needing to take away the keyboard from PC, gold finish PCB sealed and ruggedized with top rubber for top panel mounting, with backlight included (red/white optional). Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	103 keys (including 2 mouse buttons)
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	395.0mm x 146.0mm (Front panel)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA when backlight is off, 300mA with backlight on
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed & ruggedized silicone rubber military keyboard, 12 FN function keys (F1, F2...F11, F12) on the top line for easy operation, integrated with a conventional mouse with middle wheel, left/right buttons as well as one IPX6 rating 34mm optical trackball mouse at 500~1000 DPI resolution for fast cursor moving, military PCB with carbon-on-gold key switch technology with 1.50mm key stroke with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface treatment to withstand most chemicals and liquids under harsh environment, FN+ CLEAN combination key for easy cleaning via locking/disable the entire keyboard without needing to take away the keyboard from PC, CNC aluminum housing electroplated with black titanium for full black color treatment to be scratch proof, with four sinking holes for panel mount to user's device. Adjustable white backlight included. Design to meet MIL-STD-461G with (EMC, EMI, EMS, ESD) & MIL-STD-810F (wide temperature, shock, vibration, humidity etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈2.50KG
Dimension:	425.0mm x 150.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

	461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, bration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP65 dynamic sealed & ruggedized silicone rubber military keyboard, 12 FN function keys (F1, F2...F11, F12) on the top line for easy operation, integrated with a conventional handheld mouse with middle wheel, left/right buttons as well as a IP52 rated 38mm mechanical trackball mouse with 400DPI resolution for fast cursor moving, military PCB with carbon-on-gold key switch technology with 1.50mm key stroke with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface treatment withstand to most chemicals and liquids under harsh environment, FN+ CLEAN combination keys for easy cleaning via locking/disable the entire keyboard without taking away the keyboard from PC, the electronics controller module is shielded and protected by aluminum housing, with four sinking holes for panel mount to user's device. Adjustable white backlight included. Design to meet MIL-STD-461G with (EMC, EMI, EMS, ESD) & MIL-STD-810F (wide temperature, shock, vibration, humidity etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈2.50KG
Dimension:	465.0mm x 160.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability \

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic waterproof sealed and rugged durable embedded military chiclet keyboard with polymer keys, with built-in military grade PCB, 12 function keys(F1, F2, ...F11, F12) on the top line for easy operation, which is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB, with carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise. One complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, rear panel with through-hole for easy mounting and sealing. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or mistyping. Adjustable white backlight included, meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	86 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	270.0mm x 110.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2/Dot matrix optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature \

IP65 dynamic sealed and rugged durable ultrathin embedded chiclet keyboard with polymer keys, sealed and ruggedized touchpad with 2 mouse buttons for left/right clicking, 12 function keys(F1, F2, ...F11,F12) on the top line for easy operation, which is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB, with carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or mistyping. Adjustable white backlight included, meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards with 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	86+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈0.90KG
Dimension:	Keyboard:270.0mm x 110.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2/Dot matrix optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic waterproof sealed and rugged durable embedded wide temperature keyboard with polymer keys and integrated touchpad, with built-in military PCB. 12 function keys (F1, F2... F11, F12) on the top line. Which is made of CNC aluminum alloy front plate + PC key caps + carbon-on-gold key switch technology PCB, with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise. One complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, top panel mount solution. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid misoperation or mis-typing, which is good for outdoor application with direct rain and very harsh environments with humidity, much dynamic water, oil, salt mist etc. Adjustable white backlight included, built to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Part Number: K-TEK-M285TP-FN-BL-NV-151B-DWP

Feature `

IP65 dynamic water proof vandal proof aluminum alloy ruggedized military keyboard with durable polymer keys and integrated touchpad. The high quality ruggedized aluminum alloy top panel is processed by CNC. with 12 function keys (F1, F2...F11, F12) sealed, Military PCB with carbon-on-gold key switch technology with stroke 1.20mm with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium spray-paint on the aluminum alloy panel, one complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, stainless steel back plate. Adjustable white Backlight included (Red/Blue can be customized) . FN+ CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or typing mistake. Panel mounting. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	285.0mm x 179.7mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

	461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, bration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	90+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	285.0mm x 179.7mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



IP65 dynamic water proof vandal proof rugged military chiclet keyboard with durable polymer keys, integrated touchpad and military grade PCB,12 function keys(F1, F2, ...F11, F12) are on the top line. Carbon-on-gold key switch technology with (1.20mm±0.10mm)key travel with extremely good tactile feeling for fast and accurate data input without any noise. The whole keyboard is made of CNC aluminum alloy front plate + PC key caps + carbon-on-gold key switch technology with military PCB. One complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet. Super thin ruggedized aluminum back plate with mounting holes for rear panel mounting. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation and mis-typing. Which is good for outdoor application with direct rain and very harsh environments with humidity, much dynamic water, oil, salt mist etc. Adjustable white backlight included. Built to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.). Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327KP-FN-BL-NV-151B-DWP

Feature `

IP65 dynamic water proof vandal proof rugged chiclet keyboard with durable polymer keys, with 12 function keys(F1, F2, ... F11, F12) and individual numeric keypad on the right part, the whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meets MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD, as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	86+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	327.0mm x 111.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	101 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	327.0mm x 111.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



IP65 dynamic waterproof sealed and rugged durable embedded chiclet keyboard with polymer keys, with built-in military grade PCB. 12 function keys(F1, F2, ...F11,F12) on the top line, which is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB, with carbon-on -gold key switch technology with key travel 1.20mm with extremely good tactile feeling for fast and accurate data input without any noise, one complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, top panel mount with sinking holes solution. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Adjustable white backlight included, meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) Which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	101 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	334.0mm x 118.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2/Dot matrix optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature `

IP65 dynamic sealed and rugged durable embedded chiclet keyboard with polymer keys, sealed and ruggedized touchpad with 2 mouse buttons for left/right clicking, 12 function keys (F1, F2, ...F11, F12) on the top line for easy operation, which is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB, with carbon-on -gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounted with mounting holes. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid misoperation or mistyping. Adjustable white backlight included, meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD -810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), which can also meet the critical military standards with 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	101+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	Keyboard:334.0mm x 118.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 $\blacksquare 35$





IP65 dynamic water proof vandal proof stainless steel military keyboard with durable polymer keys, with IP65 static 38mm mechanical trackball module with 400~1000 DPI resolutions, with 12 function keys (F1, F2, ... F11,F12,) sealed and ruggedized Military grade PCB with carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium electroplated on the top stainless steel plate, one complete silicone rubber along the rear stainless steel plate for easy mounting & sealing tightly with cabinet, front panel with thread bolts for top panel mounting. Red/white backlight is included. The whole keyboard and trackball part can. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+3 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:2.0N±0.2N
Gross Weight:	≈2.00KG
Dimension:	390.0mm x 145.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)

Protection Level: IP65

MTBF: >20000H

MTTR: <30min

Operating Temperature: -40°C ~ +75°C

Storage Temperature: -45°C ~ +85°C

APPLICATION: Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Optional Configuration	Part Number	Remark
SET OF BETT OF BETT OF SET OF	K-TEK-M390-MTB-FN-BL-NV- 151B-BT-DT-DWP-	Keyboard with trackball
The transport of the state of t	K-TEK-M390-MTB-FN-BL-NV- 151B-BT-DT-DWP-	Flat desktop version
	K-TEK-M390TP-FN-BL-NV- 151B-BT-DWP	Keyboard with touchpad
Control Contro	K-TEK-M390TP-FN-BL-NV- 151B-BT-DT-DWP	Flat desktop version



IP68 dynamic water proof vandal proof stainless steel military keyboard with durable polymer keys, with IP65 static 38mm mechanical trackball module with 400 DPI~1000 DPI resolutions, with 12 function keys (F1, F2, ... F11 F12,)sealed and ruggedized Military Grade PCB electronics module with carbon -on-gold key switch technology with stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium electroplated on whole keyboard plate and housing, one complete silicone rubber alone the rear stainless steel plate. Movable stand alone DESK TOP VERSION. FN + CLEAN key to lock/disable the keyboard for easy cleaning without taking away the keyboard from PC. Red/ white backlight is included. The whole keyboard and trackball part can. Designed to meet with MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M354-FN-MA-NV-151B

Feature `

IP54 static rated waterproof rugged durable embedded military special mechanical keyboard, with built-in integrated military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation. The high quality ruggedized aluminum alloy panel is processed by CNC, PBT material button, with mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, top panel mounted solution with sinking holes. USB interface. Designed to Meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+3 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:2.0N±0.2N
Gross Weight:	≈2.50KG
Dimension:	390.0mm x 145.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	86 keys
Key Travel:	4.00±0.40mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N
Gross Weight:	≈2.00KG
Dimension:	354.0mm x 150.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈17mA
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +60°C
Storage Temperature:	-45°C ~ +70°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature,



Part Number: K-TEK-M418KP-FN-BL-MA-NV-151B

Feature '

IP54 static rated waterproof rugged durable embedded military mechanical keyboard, with built-in wide temperature military grade PCB, with numeric keypad, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation. The high quality ruggedized aluminum alloy panel is processed by CNC, PC material button, with mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, top panel mounted solution with sinking holes, with green backlight included, J14A-9ZJB aviation plug. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Feature

IP54 static rated waterproof rugged durable embedded military mechanical keyboard with a IPX6 34mm optical thumb ball mouse at 500~1000 DPI resolution for fast cursor moving, with built-in wide temperature military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation. The high quality ruggedized aluminum alloy panel is processed by CNC. with PC backlighting key caps, mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, top panel mounted solution with sinking holes, white backlight included and with J14A-9ZJB aviation plug. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	107 keys
Key Travel:	4.00±0.40mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N
Gross Weight:	≈2.30KG
Dimension:	418.0mm x 172.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/Aviation plug optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +60°C
Storage Temperature:	-45°C ~ +70°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	86 keys
Key Travel:	4.00±0.40mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N
Gross Weight:	≈2.80KG
Dimension:	458.0mm x 172.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/Aviation plug optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)		
Protection Level:	IP54	
MTBF:	>20000H	
MTTR:	<30min	
Operating Temperature:	-40°C ~ +60°C	
Storage Temperature:	-45°C ~ +70°C	
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.	

Feature and Reliability

EMC SPEC	MIL-STD-461D (EMC, EMI, EMS, ESD)
01	CE101 25Hz - 10kHz Conducted Emissions, Audio Frequency Currents, Power leads
02	CE102 10kHz -10MHz Conducted Emissions, Radio Frequency Potentials, Power leads
03	CS101 25Hz - 150kHz Conducted Susceptibility, Power Leads
04	CS106 Conducted Susceptibility, Transients, Power Leads
05	CS112 Electrostatic Discharge Susceptibility
06	CS114 4kHz -400MHz Conducted Susceptibility, Bulk Cable injection
07	CS115 Conducted Susceptibility, Bulk Cable injection, Impulse Excitation
08	CS116 10kHz - 100MHz Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads
09	RE101 25Hz -100kHz Radiated Emissions, Magnetic Field
1 0	RE102 10kHz - 18GHz Radiated Emissions, Electric Field
1 1	RS101 25HZ - 100kHz Radiated Susceptibility, Magnetic Field
1 2	RS103 10kHz - 40GHz Radiated Susceptibility, Electric Field

Environmental Adaptability	MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, fungus etc.)
01	Low Pressure (57kPa - 106kPa)
02	High Temperature (+75°C)
03	Low Temperature (-40°C)
04	Temperature Shock (-55°C to +75°C)
05	Rain Test (Wind velocity: no less than 18m/s, test duration: 3h)
06	Humidity (-30°C to +60°C, 95%RH)
07	Fungus (Test period: 28 days (672h))
08	Salt Spray (Test period: 96h, IEC60512-6)
09	Low Frequency Vibration
1 0	Dust Test (10.6g/m³±7g/m³)
1 1	Vibration (Frequence: 0-2000Hz, Displacement: 1mm, Acceleration:70m/s²)
1 2	Shock (40g, 11ms)
1 3	Drop Test (Drop height: 122cm)

Designed to meet the critical military standards in these 10 aspects: Reliability, Safety, Maintainability, Testability, Supportability, Environmental adaptability, Stability, Compatibility, Consistency, And continuity.



Feature

IP65 dynamic sealed & ruggedized silicone rubber military keyboard with military electronics PCB included, 12 function keys on top line for easy operation, military PCB with carbonon-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, FN+ CLEAN combination key for easy cleaning via lock/disable whole keyboard without needing to take away the keyboard from PC, panel mounted version, adjustable backlight included. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	83 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	270.0mm x 113.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)		
Protection Level:	IP65	
MTBF:	>20000H	
MTTR:	<30min	
Operating Temperature:	-40°C ~ +75°C	
Storage Temperature:	-45°C ~ +85°C	
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.	



Feature '

IP65 dynamic sealed and ruggedized silicone rubber Hygienic keyboard with full keyboard functionalities with sealed & ruggedized tough touchpad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with gold finnish PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN key to lock/disable the keyboard for easy cleaning, gold finnish PCB sealed and ruggedized with top rubber for top panel mounting, military level with adjustable backlight included. With optional stainless steel back plate sealed and ruggedized with top silicone cover & gold finnish PCB for ruggedized structure and easy mounting and sealing, Military level. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
Dimension:	275.0mm x 169.7mm(L x W)

Electrical Data

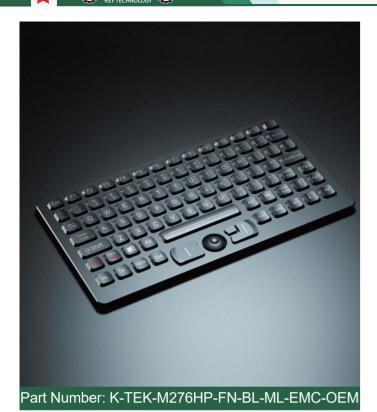
Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.) Protection Level: IP65 >20000H MTBF: MTTR: <30min Operating Temperature: -40°C ~ +75°C -45°C ~ +85°C Storage Temperature: Vehicle, aerospace, naval, defense, maritime, Radar, console, APPLICATION: portable rugged laptop, notebook, UAV ground station, GCS etc.

Optional Configuration	Part Number	Remark
To Factoring Characteria The Factoring Characte	K-TEK-M275TP-FN-BL-ML- EMC-OEM	Back view
CE CE	K-TEK-M275TP-FN-BL-ML- EMC-FDT	Mountable inclined desktop version optional
CE that is SPACOPARA SE PE STREAM AND ACT IN THE SPACE SERVICE	K-TEK-M275TP-FN-BL-ML- EMC-SS	With rugged stainless steel back plate optional





IP65 dynamic sealed and ruggedized silicone rubber military keyboard with full keyboard functionalities with a Force Sensing Resistor pointing device for fast and accurate cursor position, 12 FN keys(F1, F2...F11, F12)are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key to lock/disable the keyboard for easy cleaning, top panel mounting solution, with backlight included (red/white optional). EMC approval ensures that this model can coexist with other sensitive equipment without causing interference. Military level. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+3 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	280.4mm x 152.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)		
Protection Level:	IP65	
MTBF:	>20000H	
MTTR:	<30min	
Operating Temperature:	-40°C ~ +75°C	
Storage Temperature:	-45°C ~ +85°C	
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.	

Optional Configuration	Part Number	Remark
Enc F1 F2 F3 F4 F5 F6 F7 F6 F9 F10 F11 F12 Com- T 1 9 5 4 6 6 77 6 9 9 0 7 = 1 TT Q W E R T Y U 4 1 0 0 6 P 6 1 1 500 Common A S D F G H J1 K2 L3 1 - 1 5000- COMMO Z X C V B N Mo 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	K-TEK-M276HP-FN-BL-ML- EMC-OEM	RED Backlight
	K-TEK-M276HP-FN-BL-ML- EMC-FDT	Mountable desktop version optional
Toy Technology Chroat Limited C this SEGNERATE Comprising X-49 MICH DOMA	K-TEK-M276HP-FN-BL-ML- EMC-SS	With rugged stainless steel back plate optional



IP65 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough touch pad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, the overall key layout is compact, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounting, with adjustable backlight included. FN+CLEAN combination key to lock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer, sealed and ruggedized with top rubber for top panel mounting. Meet the military requirements of strong anti-interference, stability, and low radiation etc, wide temperature of -40 to +75°C. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD -810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	275.0mm x 169.7mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

	461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, pration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP65 dynamic sealed and ruggedized silicone rubber Hygienic keyboard with full keyboard functionalities with sealed & ruggedized tough touchpad for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with gold finnish PCB with carbon-on-gold key switch technology with long stroke (1.5mm±0.1mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment. FN + CLEAN key to lock/disable the keyboard for easy cleaning, gold finnish PCB sealed and ruggedized with top rubber for top panel mounting, military level with adjustable backlight included. With optional stainless steel back plate sealed and ruggedized with top silicone cover & gold finnish PCB for ruggedized structure and easy mounting and sealing. Designed to meet with MIL-STD-461D -EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards:reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.30KG
Dimension:	275.0mm x 174.8mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability \

	461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, bration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.







IP65 dynamic waterproof military silicone keyboard, with carbon -on-gold key switch 12 FN keys (F1, F2...F11, F12) on top line for easy operation, military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounting, with industrial backlight included. EMC approval ensures that this model can coexist with other sensitive equipment without causing interference. Military level. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Feature `

IP65 sealed reinforcement and durable embedded militarygrade silicone full-function keyboard with built-in military-grade carbon-on-gold PCB control board, with fully sealed and rugged touchpad, with 12 functional keys FN (F1, F2...F11, F12), 1.50mm key stroke with comfortable touch, accurate and fast data input. Wear-resistant and antibacterial surface, which can be used in harsh environment. FN+CLEAN key lock the entire keyboard to for easy cleaning without disconnecting or disabling the whole keyboard from the computer; With white adjustable backlight, built-in rear panel mounted solution. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	284.0mm x 109.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

	461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, pration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data `

Keys:	85+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.00KG
Dimension:	330.0mm x 130.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

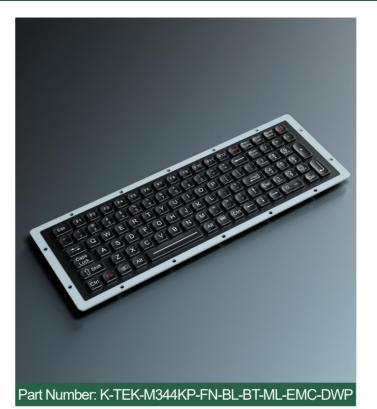
CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.







IP68 dynamic waterproof vandal proof stainless steel industrial keyboard with durable polymer keys with full keyboard functionalities, function keys(F1, F2, ... F11,F12)are on the top line for easy operation, with numeric keypad, sealed and ruggedized military PCB with carbon-on-gold key switch technology with stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, with optional high quality durable black titanium electroplated on the stainless steel housing, movable desk top version. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.



Feature `

IP65 dynamic waterproof vandal proof stainless steel industrial keyboard with durable polymer keys with full keyboard functionalities, function keys(F1, F2, ... F11,F12)are on the top line for easy operation, with numeric keypad, sealed and ruggedized military PCB with carbon-on-gold key switch technology with stroke (1.50±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium electroplated on the top stainless steel plate, one complete silicone rubber alone the rear stainless steel plate for easy mounting & sealing t ightly with cabinet, rear panel mounted. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	100 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈2.00KG
Dimension:	366.0mm x 125.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V+5%
Supply Voltage.	DC 13V1370
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

Mechanical Data

Keys:	100 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N
Gross Weight:	≈1.80KG
Dimension:	344.0mm x 111.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed and ruggedized silicone rubber military keyboard with full keyboard functionalities with a Force Sensing Resistor pointing device for fast and accurate cursor position, 24 FN keys (F1, F2...F23, F24) are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with long stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key to lock/disable the keyboard for easy cleaning, gold finish PCB sealed and ruggedized with top rubber for rear panel mounting, with stainless steel housing protects the electronics controller, with backlight included (red/white optional). Military level. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	119+3 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.10KG
Dimension:	365.0mm x 154.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability `

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP68 dynamic water proof vandal proof stainless steel industrial keyboard with durable polymer keys with full keyboard functionalities, IP65 dynamic sealed & ruggedized tough touchpad for fast and accurate cursor position, function keys(F1, F2, ... F11,F12)are on the top line for easy operation, Sealed and Military PCB with carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise. Adjustable Red Backlight included (White/Blue can be customized) . FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or typing mistake. Movable desk top version. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:2.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:3.5N±0.2N
Gross Weight:	≈2.50KG
Dimension:	390.0mm x 149.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability \

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.





IP65 dynamic sealed and ruggedized silicone rubber military keyboard with full keyboard functionalities with a Force Sensing Resistor pointing device for fast and accurate cursor position, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, with military PCB with carbon-on-gold key switch technology with key stroke (1.50mm) with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & antimicrobial keyboard surface withstand to most chemicals and liquids under harsh environment, FN + CLEAN combination key to lock/disable the keyboard for easy cleaning without needing to take away the keyboard from PC, gold finish PCB sealed and ruggedized with top rubber for top panel mounting, with red backlight included. Military level. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	104+3 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.20KG
Dimension:	396.0mm x 146.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)		
Protection Level:	IP65	
MTBF:	>20000H	
MTTR:	<30min	
Operating Temperature:	-40°C ~ +75°C	
Storage Temperature:	-45°C ~ +85°C	
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.	

Optional Configuration	Part Number	Remark
ESC F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K-TEK-M396-HP-FN-KP-BL- ML-EMC-OEM	RED Backlight
C C C C C C C C C C C C C C C C C C C	K-TEK-M396HP-KP-FN-BL- ML-EMC-DT	Mountable inclined desktop version optional
EMPRIMER PROPERTY OF THE COMMANDER TY U I O P S L TO COMMAND AS D F G H J K L S COMMAND Z X C V B N M S ? COMM 1 ? COMMAND AS D F G H J K L S C C C C C C C C C C C C C C C C C C	K-TEK-M396TP-KP-FN-BL- ML-EMC-DT	Mountable inclined desktop version with integrated touchpad optional
Exert R2 F3 F4 F3 F6 F7 F6 F9 F10 F11 F12 com 22 2 3 4 5 5 5 6 6 7 6 6 7 6 7 6 7 6 7 6 7 6 7 6	K-TEK-M396TP-KP-FN-BL- ML-EMC-OEM	Integrated touchpad optional





IP65 dynamic water proof vandal proof stainless steel industrial keyboard with durable polymer keys with full keyboard functionalities, IP65 dynamic sealed & ruggedized tough touchpad for fast and accurate cursor position, function keys(F1, F2, ... F11,F12)are on the top line for easy operation, Sealed and Military PCB with carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise. Adjustable Backlight included(White, Red or Blue are optional). FN+CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or typing mistake. One complete silicone rubber alone the rear stainless steel plate for easy mounting & sealing tightly with cabinet, rear panel with mounting holes for rear panel mounted. Designed to meet with MIL-STD-461D-EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	87+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:2.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:3.5N±0.2N
Gross Weight:	≈1.80KG
Dimension:	390.0mm x 149.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Feature

IP65 dynamic water proof vandal proof stainless steel military keyboard with durable polymer keys with full keyboard functionalities, IP65 dynamic sealed & ruggedized tough touchpad for fast and accurate cursor position, function keys (F1, F2, ... F11,F12) are on the top line for easy operation, sealed and ruggedized military PCB with carbon-on-gold key switch technology with long stroke (1.20mm±0.10mm), with extremely good tactile feeling for fast and accurate data input without any noise, one complete silicone rubber along rear stainless steel plate for easy mounting & sealing tightly with cabinet, top panel with mounting holes mounted. Red/white backlight is included. Designed to meet with MIL-STD-461D -EMC-EMI-EMS-ESD, and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	89+2 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:2.0N±0.2N
Gross Weight:	≈1.80KG
Dimension:	390.0mm x 145.0mm(L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA(with backlight off); ≈300mA(with backlight on)
Connect Interface:	USB/PS2 optional
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)	
Protection Level:	IP65
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +75°C
Storage Temperature:	-45°C ~ +85°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.

 $\mathbf{5}$ 9 60