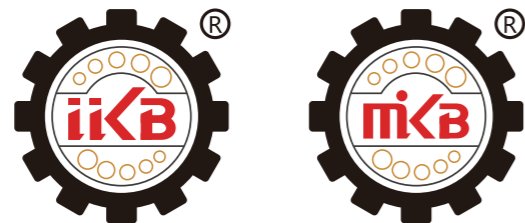


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KEY TECHNOLOGY CHINA LIMITED



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# RUGGED SILICONE KEYBOARD CATALOGUE

Rugged Keyboards and Mice Expert



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# 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-810H, IP67, IP68, Medical, Explosive-proof, high and low temperature testing as well as patent certificates.

## Advantages of this series of products

1. NO MOQ
2. Designed to meet MIL-STD-461G-EMC-EMI-EMS-ESD
3. Fully sealed and ruggedized, perform well in dynamic waterproof/dust and sandstrom-proof
4. A reinforced and rugged stainless steel or aluminum back plate for installation optional, if no weight limit
5. Designed to meet these 10 critical standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity
6. Designed to meet MIL-STD-810H-Environmental adaptability (high and low wide temperature of -40°C to +75°C, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.);

## Disadvantages of this series of products

1. Heavy tactile feeling, possible to have uneven actuation of every key
2. The whole rugged structure is a bit thicker and heavier due to the silicone cover and PCB board
3. Keyboard and casing are sealed with glue, it will be inconvenient to replace or maintain
4. Non-vandalproof, when the side of keys is pressed or squeezed vigorously, there will be risk of broken sloping sidewall
5. When pressing the side or four corners of keys, the four corners and sides of keys cannot fall at the same time due to its internal structure, and might be tilt;
6. Fast typing tends to cause fatigue, also there will be the possibility of sticking keys, missing key value, or repeated key value output, which can be optimized by improving the key structure, material and program, but cannot be completely avoided and eliminated;

★ Patent No.: ZL 2024 3 0193876.7

# CONTENTS

## 01

## Rugged Silicone Rubber Keyboard

### Product Application





## ★ 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
1 2	RS103 10kHz - 40GHz Radiated Susceptibility, Electric Field

Environmental Adaptability	MIL-STD-810H (high and low wide temperature (-40°C-+75°C), low pressure (Altitude), humidity, vibration, shock, salt fog, temperature shock, drop, rain, sand & dust, fungus, solar radiation 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/m <sup>3</sup> ±7g/m <sup>3</sup> )
1 1	Vibration (Frequency: 0-2000Hz, Displacement: 1mm, Acceleration:70m/s <sup>2</sup> )
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.



Part Number: K-TEK-M205-DHP-FN-NV-151B

### 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-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, rear panel mounted with mounting holes. Military level. Designed to meet with **MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M232-FN-BL-NV-151B

### Feature

IP67 dynamic fully sealed and durable embedded silicone rubber rugged keyboard with built-in military grade PCB, and 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.30±0.10mm) 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, with super thin ruggedized aluminum back plate with mounting holes for rear panel mounting, adjustable white backlight included. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H** (high and low wide working temperature, low pressure, humidity, vibration, shock, temperature shock, drop, rain, sand and 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:	78 keys
Key Travel:	1.30±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.20KG
Dimension:	232.0mm x 100.0mm (L x W)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M232TP-FN-BL-NV-151B

### Feature

IP67 dynamic fully sealed and durable embedded silicone rubber rugged keyboard with integrated tough touchpad with 400 DPI resolution for fast cursor position, with built-in military grade PCB, and 12 function keys on top line for easy operation, with carbon-on-gold key switch technology with key stroke (1.30±0.10mm) 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, with super thin ruggedized aluminum back plate with mounting holes for rear panel mounting, adjustable white backlight included. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H** (high and low wide working temperature, low pressure, humidity, vibration, shock, temperature shock, drop, rain, sand and 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:	80 keys (including 2 mouse buttons)
Key Travel:	1.30±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.50KG
Dimension:	232.0mm x 137.0mm (L x W)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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



K-TEK-M270-FN-BL-NV-151B+  
M73TP

Keyboard with touchpad



K-TEK-M270-FN-BL-NV-151B+  
TP80-DML+2KEY

Keyboard with touchpad



Part Number: K-TEK-M270-FN-BL-NV-151B+TP65+2KEY

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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-810H** (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: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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-NV-EMC-151B

### Feature

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. Designed to meet with **MIL-STD-461G-EMC-EMI-EMS-ESD, and MIL-STD-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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
	K-TEK-M275-DHP-FN-BL-NV-151B-OEM	Keyboard with force sensing resistor hula pointer
	K-TEK-M275TP-FN-BL-ANA-151B-SS	Compliant with MIL-STD-461G and 810H (Army-Navy-Airforce), with stainless steel back plate
	K-TEK-M275TP-FN-BL-NV-151B-FDT	Flat desktop version with VESA mounting holes
	K-TEK-M275TP-FN-BL-NV-EMC-151B-SS	Compliant with MIL-STD-461G and 810H, with stainless steel back plate
	K-TEK-M275TP-FN-BL-NV-EMC-151B-V01	Compliant with MIL-STD-461G and 810H, with stainless steel back plate



Part Number: K-TEK-M275-DHP-FN-BL-NV-151B-OEM

### Feature

IP65 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough Force Sensing Resistor pointing device which can work well with thick gloves or very dirty environment, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, the overall key layout is compact, with carbon-on-gold key switch technology with long 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. **FN + CLEAN** combination keys for easy cleaning without taking keyboard away from PC to avoid mis-operation or mistyping. With adjustable white or red backlight included, top panel mounting solution. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD)** and **MIL-STD-810H** (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:	89+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-ANA-151B-SS

### Feature

IP65 dynamic sealed and ruggedized silicone rubber military keyboard with sealed and tough touch pad with 400DPI resolutions 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± 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 adjustable backlight included. **FN+CLEAN** combination key to lock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer, with rugged stainless steel backplate. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD)** and **MIL-STD-810H** (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:	89+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) (Front panel)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-NV-EMC-151B-SS

### Feature

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±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 adjustable backlight included. **FN+CLEAN** combination key to lock/disable the whole keyboard for easy cleaning without disconnecting the keyboard from computer, PCB with stainless steel back plate sealed and ruggedized with top industrial silicone cover & industrial PCB for ruggedized structure and easy mounting and sealing, stainless steel housing protects the electronics controller. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H** (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:	89+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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-NV-EMC-151B-V01

### Feature

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. With exposed copper treatment surrounding the edges of backside PCB and designed without silicone rubber around the PCB edges for optimizing the sealing with cabinet and preventing electromagnetic leakage from the device. Meet the military requirements of strong anti-interference, stability, and low radiation etc. Designed to meet **MIL-STD-461G(EMC, EMI, EMS, ESD) and MIL-STD-810H** (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:	89+2 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.80KG
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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-NV-151B-FDT

### 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, 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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-M281-DHP-FN-BL-NV-151B

### 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 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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

### Feature

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-810H (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)

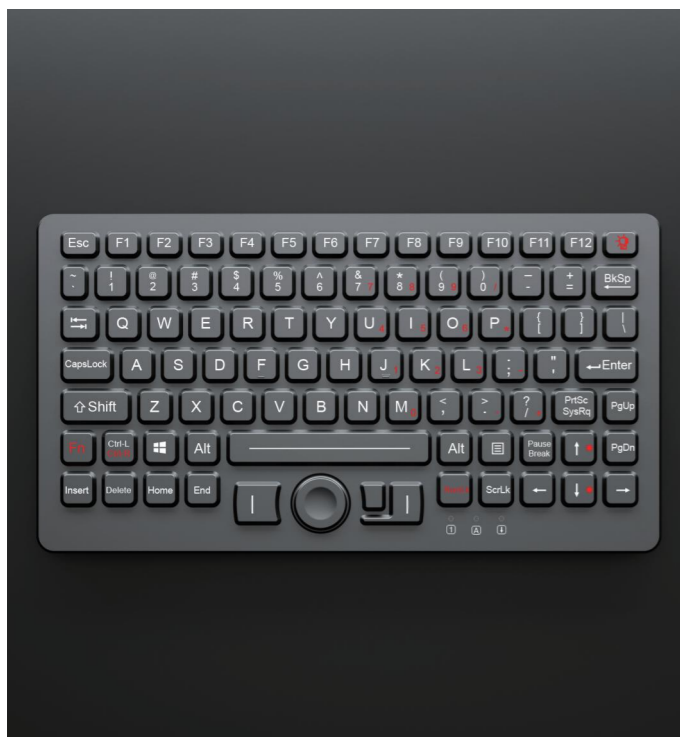
### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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
	K-TEK-M282-DHP-FN-BL-151B -IK-OEM	Compatible with IKEY's keyboard, MIL-STD-461G and 810H standard
	K-TEK-M282-DHP-FN-BL-NV-151B-JC	MIL-STD-461G and 810H standard
	K-TEK-M282-DHP-FN-BL-NV-151B-SS	With rugged stainless steel backplate



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

### Feature

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 mounted solution with stainless steel back plate and threaded bolts, with red backlight included. With a single USB output. Military level, designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD)** and **MIL-STD-810H** (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:	87+3 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈1.50KG
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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M282-DHP-FN-BL-151B-1K-OEM

### 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 (1.40mm) 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 solution, yellow backlight included, USB interface. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD)** and **MIL-STD-810H** (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:	86+3 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Gross Weight:	≈0.80KG
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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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-810H** (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

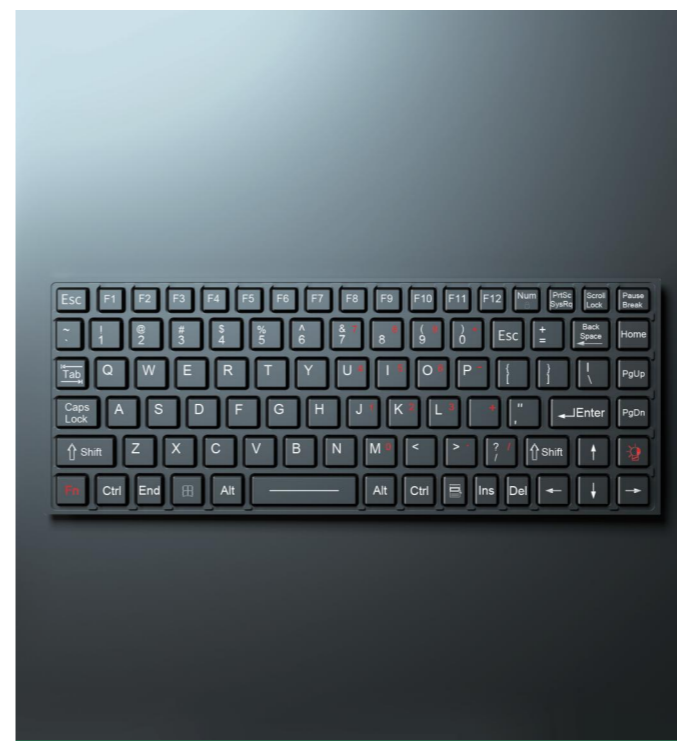
Keys:	89 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈0.70KG
Dimension:	282.4mm x 153.6mm(L x W)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M284-FN-BL-NV-151B-OEM

### 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-810H** (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:	≈0.60KG
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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M284-FN-BL-NV-151B+M73TP

### Feature

IP65 sealed & ruggedized silicone rubber military keyboard with separated tough touchpad for fast cursor position, 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 mounted solution for keyboard and touchpad for rear panel mounted solution, adjustable white/red backlight included, with USB interface. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, drop, 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:	89+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:284.0mm x109.0mm (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M284-FN-BL-NV-151B+TP6549-002

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M312TP-FN-BL-NV-151B-DT

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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-M315KP-FN-BL-NV-151B+TP80-DML

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M315KP-FN-BL-NV-151B

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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



K-TEK-M315KP-FN-BL-NV-151B  
+M73TP

Keyboard with touchpad



K-TEK-M315KP-FN-BL-NV-151B  
+M125TP

Keyboard with large-size touchpad



K-TEK-M315KP-FN-BL-NV-151B  
+TP80-DML

Keyboard with touchpad



K-TEK-M315TP-FN-BL-NV-151B

Integrated touchpad version



K-TEK-M315TP-FN-BL-NV-151B  
-SDT

Swivel-mounted desktop version, with integrated touchpad



Part Number: K-TEK-M315KP-FN-BL-NV-151B+M125TP

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M315KP-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, 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M315TP-FN-BL-NV-151B

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M315TP-FN-BL-NV-151B-SDT

### Feature

IP68 dynamic sealed and durable hinge-integrated desktop silicone rubber rugged keyboard,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,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, adjustable white backlight included.Designed to meet **MIL-STD-461G (EMC, EMI, EMS,ESD)and MIL-STD-810 H** (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.

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:	≈1.60KG
Dimension:	345.0mm x 157.0mm x 35.0mm (L x W x H)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



### 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-810H** (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-M316-OTB-151B-FN-ML

### 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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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 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-810H** (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-M317TP-KP-FN-BL-UT-NV-151B-OEM

### 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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M349TP-KP-FN-BL-NV-151B

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M378TP-FN-BL-DWT-151B-25KV-DT-DWP

### 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-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, 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 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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-M380-DHP-FN-BL-DWT-151B-25KV-DT-DWP

### Feature

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-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, 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-810H** (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:	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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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-810H** (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:	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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M386TP-FN-BL-NV-151B

### 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, 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



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 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M425-OTB-FN-BL-NV-151B

### 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 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M449-OTB-KP-FN-BL-NV-151B-BT

### 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 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 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 treatment to withstand most chemicals and liquids under harsh environment, with numeric keypad on the right side of keyboard. **FN+ CLEAN** combination key for easy cleaning via locking/disable the entire keyboard without needing to take away the keyboard from PC, black titanium electroplated SUS304 stainless steel front and back plate, panel mounted solution. Adjustable white backlight included. Designed to meet **MIL-STD-461G** (EMC, EMI, EMS, ESD) and **MIL-STD-810H** (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:	102+3 keys
Key Travel:	1.50±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.5N±0.2N
Gross Weight:	≈3.00KG
Dimension:	449.0mm x 140.0mm (Front Panel)

### Electrical Data

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

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M465-38-MTB-AVB-FN-BL-NV-151B

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461G-EMC-EMI-EMS-ESD and MIL-STD-810H (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 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-810H (high and low wide temperature (-40°C+75°C), low pressure (Altitude), humidity, vibration, shock, salt fog, temperature shock, drop, rain, sand & dust, fungus, solar radiation 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/m <sup>3</sup> ±7g/m <sup>3</sup> )
1 1	Vibration (Frequence: 0-2000Hz, Displacement: 1mm, Acceleration:70m/s <sup>2</sup> )
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.



Part Number: K-TEK-M270-FN-BL-NV-EMC-OEM

### 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 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, **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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-NV-EMC-OEM

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M275TP-FN-BL-ML-EMC-OEM

### 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 finish 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 finish 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 finish 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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
	K-TEK-M275TP-FN-BL-ML-EMC-OEM	Back view
	K-TEK-M275TP-FN-BL-ML-EMC-FDT	Mountable inclined desktop version optional
	K-TEK-M275TP-FN-BL-ML-EMC-SS	With rugged stainless steel back plate optional



Part Number: K-TEK-M276HP-FN-BL-ML-EMC-OEM

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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



K-TEK-M276HP-FN-BL-ML-EMC-OEM

RED Backlight



K-TEK-M276HP-FN-BL-ML-EMC-FDT

Mountable desktop version optional



K-TEK-M276HP-FN-BL-ML-EMC-SS

With rugged stainless steel back plate optional



Part Number: K-TEK-M275TP-FN-BL-ML-SQ-EMC-OEM

### 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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M284-FN-BL-ML-EMC-OEM

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M330TP-FN-BL-NV-EMC-OEM

### Feature

IP65 sealed reinforcement and durable embedded military-grade 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-810H** (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:	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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M365HP-KP-FN-BL-ML-EMC-OEM

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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.



Part Number: K-TEK-M396-HP-FN-KP-BL-ML-EMC-OEM

### Feature

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-810H** (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
OS:	All Windows, Mac OSX, Vxworks, Android, Linux, Unix

### Reliability

CE/FCC/ROHS, MIL-STD-461D-EMC-EMI-EMS-ESD and MIL-STD-810H (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



K-TEK-M396-HP-FN-KP-BL-ML-EMC-OEM

RED Backlight



K-TEK-M396HP-KP-FN-BL-ML-EMC-DT

Mountable inclined desktop version optional



K-TEK-M396TP-KP-FN-BL-ML-EMC-DT

Mountable inclined desktop version with integrated touchpad optional



K-TEK-M396TP-KP-FN-BL-ML-EMC-OEM

Integrated touchpad optional