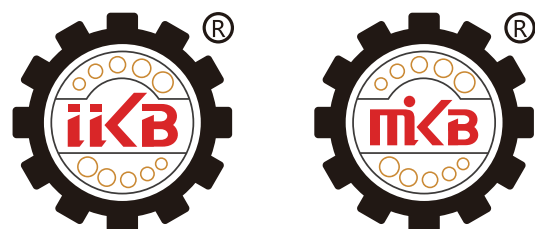


RUGGED KEYBOARD AND MOUSE

Designed for Multifunctional Naval Display Console



深圳市键特电子有限公司
东莞市键特电子有限公司
KEY TECHNOLOGY CHINA LIMITED



Wechat: Keytechnology

Email: sales01@key-tek.cn, sales05@key-tek.cn

Telephone: +86-755-89230460, +86-755-89253893

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

Head Office Add: B702, Building 1, Tian'an Cyber Park, HuangGe North Rd, Long Gang District, ShenZhen, P.R. China. Zip Code: 518172

Factory Add: Floor 7, Building S8, Fenggang Tianan Cyber Park, No. 208 Fenggang Section, Dongshen Road, Fenggang Town, DongGuan City, Guang Dong Province, P.R. China. Zip Code: 523703

Beijing Office Add: 1205, Floor 12, Building 7, No. 26 Chengtong Street, Shijingshan District, Beijing, P.R. China. Zip Code: 100043





Company Profile

Key Technology China Limited – Trusted Excellence in Rugged Input Solutions

Founded in 2006, Key Technology China Limited is a premier designer and manufacturer of rugged keyboards and pointing devices purpose-built for mission-critical and harsh-environment applications.

As an ISO9001:2015 and GJB9001C:2017 certified enterprise, we serve a diverse clientele across industrial automation, military defense, marine navigation, medical systems, coal and mining, oil and gas, aerospace, public infrastructure, food processing, and vehicle-mounted sectors. Our strength lies in our seasoned in-house teams—spanning R&D, engineering, quality assurance, and operations—who work in unison to deliver products that meet the most stringent performance standards.

Whether selecting from our extensive catalog of standard models or embarking on a fully bespoke development project, customers benefit from our responsive technical support and unwavering commitment to quality.

Validation is at the core of what we do. Our products have successfully passed a comprehensive suite of international and military-grade tests, including CE, RoHS, FCC, REACH, MIL-STD-461G (EMC/EMI/EMS/ESD), MIL-STD-810H (covering wide temperature extremes, altitude, humidity, vibration, shock, salt spray, thermal shock, rain, dust, fungus, and solar radiation etc.), IEC60945-2002, IP67, and IP68. In addition, we hold medical-device compliance, explosion-proof certifications, and multiple technology patents—affirming our capability to deliver safe, reliable, and legally compliant solutions worldwide.

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

Designed to meet the critical military standards in these 10 aspects:

Reliability, Safety, Maintainability, Testability, Supportability, Environmental adaptability, Stability, Compatibility, Consistency, and Continuity.



Part Number: K-TEK-M129-58-OMS-NV-151B-DT-DWP

Feature

IP68 dynamic rated sealed and rugged waterproof professional optical mouse, with built-in wide temperature military grade PCB electronics controller, extreme good tactile feeling for left and right clicking, durable coating & antimicrobial surface to withstand most chemicals and liquids under harsh environments, USB interface with a retractable cable for adjustable length, plug and play, as well as CNC storage case with versatile cable routing for easy organization. Designed to meet **MIL-STD-461G (EMC, EMI, EMS, ESD)** and **MIL-STD-810H** (high and low temperature, low pressure, humidity, vibration, salt spray, shock, temperature shock, drop test etc), as well as critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. **Patent number: 202422493192.6**

Mechanical Data

Keys:	4 keys
Rotary Encoder Lifespan:	≥0.8 millions scrolling
Actuation Force:	0.55±0.15N
Dimension:	129.0mm x 172.0mm x 53.0mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈80mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +55°C
Storage Temperature:	-45°C ~ +60°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M129-58-OMS-DT-DWP

Feature

IP68 dynamic rated sealed and rugged waterproof professional optical mouse, DPI can be adjusted and switched by mouse button, with extremely good tactile feeling for left and right clicking, durable coating & antimicrobial surface to withstand most chemicals and liquids under harsh environments, USB interface with a retractable cable for adjustable length, plug and play, as well as CNC storage case with versatile cable routing for easy organization. Designed to meet **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; MIL-STD-461G-EMC-EMI-EMS-ESD optional. **Patent number: 202422493192.6**

Mechanical Data

Keys:	4 keys
Rotary Encoder Lifespan:	≥0.8 millions scrolling
Actuation Force:	0.55±0.15N
Dimension:	129.0mm x 172.0mm x 53.0mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈80mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +55°C
Storage Temperature:	-45°C ~ +60°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V345-FN-BL-FC-PR-ANA-151B-DWP-SDT

Feature

IP68 fully dynamic sealed rugged patented pry-resistant scissor switch keyboard with built in integrated military grade control module, 12 function keys (F1, F2, ... F12) are on top line for easy operation. It adopts rugged scissor switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key or repeat output during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment. **FN + CLEAN** combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Adjustable white backlight included, swivel mounted desktop version. 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, salt mist, dust, fungus, solar radiation etc.), as well as the critical standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. **Patent number: 202422198937.6**

Mechanical Data

Keys:	92 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Dimension:	345.0mm x 157.0mm x 35.5mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +65°C
Storage Temperature:	-50°C ~ +75°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V345-FN-BL-FC-PR-ML-DWP-SDT

Feature

IP68 fully dynamic sealed rugged patented pry-resistant scissor switch keyboard with built in integrated military grade control module, 12 function keys (F1, F2, ... F12) are on top line for easy operation. It adopts rugged scissor switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key or repeat output during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment. **FN + CLEAN** combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Adjustable white backlight included, swivel mounted desktop version. Designed to meet **MIL-STD-810H** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), as well as the critical standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. MIL-STD-461G-EMC-EMI-EMS-ESD optional. **Patent number: 202422198937.6**

Mechanical Data

Keys:	92 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Dimension:	345.0mm x 157.0mm x 35.5mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +65°C
Storage Temperature:	-50°C ~ +75°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V345-FN-BL-FC-PR-ANA-151B-DWP-SDT+PivotAssembly

Feature

IP68 fully dynamic sealed rugged patented pry-resistant scissor switch keyboard with built in integrated military grade control module, 12 function keys (F1, F2, ... F12) are on top line for easy operation. It adopts rugged scissor switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key or repeat output during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment. **FN + CLEAN** combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Adjustable white backlight included. Engineered with premium stainless steel black titanium-coated swivel brackets symmetrically mounted on both right and left sides, this keyboard boasts a precisely matched bracket-and-hinge system that enables effortless 0° to 180° flip-angle adjustment. After the keyboard is flipped to 180°, dedicated locking pins engage to provide a positive mechanical hard stop, firmly securing the keyboard against any wobble, deflection, or loosening during vibration, delivering uncompromising structural integrity, stable performance and reliable operation under demanding conditions. 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, salt mist, dust, fungus, solar radiation etc.), as well as the critical standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. **Patent number: 202422198937.6**

Mechanical Data

Keys:	92 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Dimension:	345.0mm x 157.0mm x 35.5mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +65°C
Storage Temperature:	-50°C ~ +75°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V345-FN-BL-FC-PR-ML-DWP-SDT+PivotAssembly

Feature

IP68 fully dynamic sealed rugged patented pry-resistant scissor switch keyboard with built in integrated military grade control module, 12 function keys (F1, F2, ... F12) are on top line for easy operation. It adopts rugged scissor switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key or repeat output during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment. **FN + CLEAN** combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Adjustable white backlight included. Engineered with premium stainless steel black titanium-coated swivel brackets symmetrically mounted on both right and left sides, this keyboard boasts a precisely matched bracket-and-hinge system that enables effortless 0° to 180° flip-angle adjustment. After the keyboard is flipped to 180°, dedicated locking pins engage to provide a positive mechanical hard stop, firmly securing the keyboard against any wobble, deflection, or loosening during vibration, delivering uncompromising structural integrity, stable performance and reliable operation under demanding conditions. Designed to meet **MIL-STD-810H** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), as well as the critical standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. MIL-STD-461G-EMC-EMI-EMS-ESD optional. **Patent number: 202422198937.6**

Mechanical Data

Keys:	92 keys
Key Travel:	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Dimension:	345.0mm x 157.0mm x 35.5mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +65°C
Storage Temperature:	-50°C ~ +75°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M345-FN-BL-MA-NV-151B-SDT

Feature

IP54 static rated rugged durable embedded military mechanical keyboard, with built-in integrated military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation, featuring CNC aluminum alloy panel + backlit keycaps (supporting replacement of backlit keycaps) + mechanical switch technology; Ultra-long key lifespan of up to 50 million actuation, every key is specially reinforced using professional methods for enhanced durability; 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, swivel mounted desktop version and USB interface, with white backlight included. Designed to comply 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.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	86 keys
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	345.0mm x 157.0mm x 35.0mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA when backlight is off, ≈300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +60°C
Storage Temperature:	-45°C ~ +70°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V386KP-FN-BL-FC-PR-ML-HG-SDT-DWP

Feature

IP68 fully dynamic sealed rugged patented pry-resistant scissor switch keyboard with built in integrated military grade control module, 12 function keys (F1, F2, ... F12) are on top line for easy operation, with numeric keys on right side. It adopts rugged scissor switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key or repeat output during the keyboard operation, with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment. **FN + CLEAN** combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Adjustable white backlight included. Engineered with premium stainless steel black titanium-coated swivel brackets symmetrically mounted on both right and left sides, this keyboard boasts a precisely matched bracket-and-hinge system that enables effortless 0° to 180° flip-angle adjustment. After the keyboard is flipped to 180°, dedicated locking pins engage to provide a positive mechanical hard stop, firmly securing the keyboard against any wobble, deflection, or loosening during vibration, delivering uncompromising structural integrity, stable performance and reliable operation under demanding conditions. Designed to meet **MIL-STD-810H** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), as well as the critical standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity. MIL-STD-461G-EMC-EMI-EMS-ESD optional.
Patented keyboard (Patent number: 202422198937.6)

Mechanical Data

Keys:	107 keys
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	418.0mm x 172.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA when backlight is off, ≈300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP68
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +65°C
Storage Temperature:	-50°C ~ +75°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M418KP-FN-BL-MA

Feature

IP54 static rated waterproof rugged durable embedded mechanical keyboard, with numeric keypad, 12 FN keys (F1, F2 ...F11, F12) on top line for easy operation. PC material backlight button with ultra-long key lifespan of up to 50 million presses, each key strongly reinforced by using special professional methods, mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, CNC aluminum alloy front plate with sinking holes for top panel mounted solution, with green backlight included and USB. Designed to meet **MIL-STD-810H** (high and low wide working temperature, low pressure, humidity, vibration, shock, salt mist, temperature shock, drop, rain, sand and dust, fungus, solar radiation etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	107 keys
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	418.0mm x 172.0mm (L x W)

Electrical Data

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

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +60℃
Storage Temperature:	-45℃ ~ +70℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M418KP-FN-BL-MA-BT

Feature

IP54 static rated waterproof rugged durable embedded mechanical keyboard, with numeric keypad, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation. PC material backlight button with ultra-long key lifespan of up to 50 million presses, each key strongly reinforced by using special professional methods, mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface to withstand bacteria and work well under harsh environment, black titanium electroplated stainless steel front plate with sinking holes for top panel mounted solution, with green backlight included and USB. Designed to meet **MIL-STD-810H** (high and low wide working temperature, low pressure, humidity, vibration, shock, salt mist, temperature shock, drop, rain, sand and dust, fungus, solar radiation etc.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	107 keys
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	418.0mm x 172.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA when backlight is off, ≈300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +60℃
Storage Temperature:	-45℃ ~ +70℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M129-OTB-AVR-NV-151B

Feature

IPX6 rated ergonomic rugged military anti-vibration and removable optical thumb ball mouse, with 300-1200CPI resolutions for fast and accurate cursor position, extreme comfortable and smooth operation without any noise. It is also equipped with a removable ring to detach the ball for easy cleaning. With CNC aluminum black titanium electroplated rugged plate with sinking holes for top panel mount solution, USB output or aviation plug. 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, sand & 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.
Patent No.: ZL202521127027.7

Mechanical Data

Keys:	5 keys
Key Lifespan:	>1 million ball revolutions
Actuation Force:	2.5N±0.2N
Dimension:	129.0mm x 172.0mm(top panel)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	80mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IPX6
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, UAV ground station etc.

Optional Configuration

Part Number

Remark



K-TEK-M129-OTB-AVR

Without MIL-STD-461G & MIL-STD-810H optional



K-TEK-M129-OTB-AVR-NV-151B-BT

Black titanium electroplated optional



K-TEK-M129-OTB-NV-151B

Non-removable trackball optional



K-TEK-M129-OTB-NV-151B-BT

Non-removable trackball, black titanium electroplated optional



K-TEK-M129-OTB

Non-removable trackball, without MIL-STD-461G & MIL-STD-810H optional



Feature

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

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

Mechanical Data

Keys:	107 keys
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	418.0mm x 172.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA when backlight is off, ≈300mA with backlight on
Connect Interface:	J14A-9ZJB aviation plug
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40°C ~ +60°C
Storage Temperature:	-45°C ~ +70°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Feature

IP54 static industrial grade rugged scissors switch keyboard, with numeric keypad on right side of keyboard and 12 FN keys (F1, F2 ...F11, F12) on top line for easy operation, scissors switch technology with 2.0mm±0.2mm long stroke with extremely good tactile feeling for accurate and fast data input without any noise, there will be no key value missing, no stuck key, no repeated key value output during the keyboard operation. Adjustable white backlight color included for dim working environment. With NUM Lock/CAPS Lock/Scroll Lock indicators on upper right part of the keyboard. Rugged black titanium electroplated stainless steel front plate with sinking holes for top panel mounting.

Part Number: K-TEK-V418KP-FN-SC-BL-BT

Mechanical Data

Keys:	104 keys
Key Travel:	2.0mm ± 0.2mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N - 0.8N
Dimension:	418.0mm x 172.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA when backlight is off, ≈300mA with backlight on
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS Compliant, CE and FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-M458-OTB-FN-MA-BL-NV-151B

Feature

IP54 static rated waterproof rugged durable embedded military mechanical keyboard with a IPX6 34mm optical thumb ball mouse at 500~1000 DPI resolution for fast cursor moving, with built-in integrated military grade PCB, 12 FN keys (F1, F2...F11, F12) are on top line for easy operation. The high quality ruggedized aluminum alloy panel is processed by CNC, PC material button, with mechanical axis key switch and 4.00mm long stroke with extremely good tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface, it can be used in harsh environments to well withstand bacteria, with six sinking holes for panel mount to user's device. Adjustable green backlight included. J14A-9ZJB aviation plug. Designed to Meet **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.), which can also meet the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Mechanical Data

Keys:	86 keys + 2 mouse buttons + 1 middle wheel button + 1 optical trackball
Key Travel:	4.0mm±0.4mm
Key Lifespan:	>50 million actuations
Actuation Force:	0.55N±0.15N (pressure point)
Dimension:	458.0mm x 172.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈50mA when backlight is off, ≈300mA with backlight on
Connect Interface:	J14A-9ZJB aviation plug
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, 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, salt mist, dust, fungus, solar radiation etc.)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +60℃
Storage Temperature:	-45℃ ~ +70℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, UAV ground station etc.