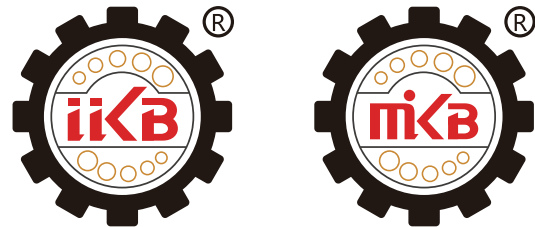


DYNAMIC WATERPROOF SCISSOR SWITCH KEYBOARD

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 mine/oil and gas/transportation/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. Ranging from our off-the-shelf products to customized one, we can always deliver you a satisfying solution! Besides, our products have obtained many certificates/testing reports including but not limit to CE, RoHS, FCC, ESD, REACH, GJB151A-1997, GJB150A-2009, GJB151B-2013, MIL-STD-461G-EMC-EMI-EMS-ESD, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), IEC60945-2002, IP67, IP68, Medical, Explosive-proof as well as patent certificates.

Advantages of this series of products

1. Keep the advantages of superior light and comfortable tactile feeling of regular scissor switch keyboards, fast typing experience and will not easily get fatigued
2. Fully sealed dynamic waterproof patented technology to solve the defects of non-waterproofness of regular scissor switch keyboards
3. Fully rugged structure to solve the defects of regular scissor switch keyboards that are not resistant to prying, scratch or vibration
4. Upgrade to fully sealed rugged and super thin FPC patented structure from membrane switch, which solves well the problem of failing to work under -40°C to +75° or humidity
5. Keep the benefits to press the side or four corners of keys, there are fast and sensitive data input, the four corners and sides of keys as well as the front will fall at the same time, but without tilt
6. Top and rear panel mounted solution optional
7. Keyboard and casing are sealed and ruggedized, easy for maintenance
8. Others

Disadvantages of this series of products

1. The whole rugged structure is a bit thicker and heavier than regular scissors switch keyboards
2. Gaps between rugged frame and keys which is not good to withstand dust and sandstorm
3. Larger MOQ, higher cost for small quantities to order related accessories
4. Others

★ 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-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, fungus etc.)
01	Low Pressure (57kPa - 106kPa)
02	High Temperature (+75 ℃)
03	Low Temperature (-40 ℃)
04	Temperature Shock (-55 ℃ to +75 ℃)
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 (Frequence: 0-2000Hz, Displacement: 1mm, Acceleration:70m/s²)
1 2	Shock (40g, 11ms)
1 3	Drop Test (Drop height: 122cm)

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

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



Part Number: K-TEK-V275TP-FN-BL-SC-FC-ML-DWP

Feature

93 keys IP67 fully sealed waterproof and durable embedded ultra thin rugged patented scissor switch keyboard, with built-in ultra-thin Flexible Printed Circuit , with fully sealed waterproof reinforced wide temperature touchpad with 400DPI for fast and accurate cursor position, 12 function keys(F1, F2, ... F12) are on top line for easy operation, with combination numbers on letter keys for full keyboard functionality. It adopts 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 (Red/Green/ Yellow optional) included, panel mount solution. Designed to meet **MIL-STD-810F** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), and **MIL-STD-461G-EMC-EMI-EMS-ESD (optional)**, 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: 202422198937.6)

Mechanical Data

Keys:	91 keys (including 2 mouse buttons)
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Gross Weight:	≈ 0.40KG
Dimension:	275.0mm x 108.0mm (Maximum frame size)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	Dot matrix, USB, PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP67 (front panel)
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +75℃
Storage Temperature:	-50℃ ~ +85℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Part Number: K-TEK-V285-FN-BL-SC-FC-ML-DWP

Feature

86 keys compact IP67 fully sealed waterproof and durable embedded ultra thin rugged patented scissor switch keyboard, with built-in ultra-thin Flexible Printed Circuit, 12 function keys (F1, F2, ... F12) are on top line for easy operation, and numeric keypad on right side. It adopts 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 (Red/Green/ Yellow optional) included, panel mount solution. Designed to meet **MIL-STD-810F** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), and **MIL-STD-461G-EMC-EMI-EMS-ESD (optional)**, 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: 202422198937.6)

Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Gross Weight:	≈ 0.35KG
Dimension:	285.0mm x 108.0mm (Maximum frame size)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	Dot matrix, USB, PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP67 (front panel)
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +75℃
Storage Temperature:	-50℃ ~ +80℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Part Number: K-TEK-V340KP-FN-BL-SC-FC-ML-DWP

Feature

103 keys IP67 fully sealed waterproof and durable embedded ultra thin rugged patented scissor switch keyboard, with built-in ultra-thin Flexible Printed Circuit, 12 function keys(F1, F2, ... F12) are on top line for easy operation, and numeric keypad on right side. It adopts 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 (Red/Green/Yellow optional) included, panel mount solution. Designed to meet **MIL-STD-810F** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), and **MIL-STD-461G-EMC-EMI-EMS-ESD (optional)**, 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: 202422198937.6)

Mechanical Data

Keys:	103 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Gross Weight:	≈ 0.40KG
Dimension:	340.0mm x 108.0mm (Maximum frame size)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	Dot matrix, USB, PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP67 (front panel)
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +75℃
Storage Temperature:	-50℃ ~ +80℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Part Number: K-TEK-V340TP-FN-BL-SC-FC-ML-DWP

Feature

88 keys IP67 fully sealed waterproof and durable embedded ultra thin rugged patented scissor switch keyboard, with built-in ultra-thin Flexible Printed Circuit , with fully sealed waterproof reinforced wide temperature touchpad with 400DPI for fast and accurate cursor position, 12 function keys(F1, F2, ... F12) are on top line for easy operation, with combination numbers on letter keys for full keyboard functionality. It adopts 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 (Red/Green/Yellow optional) included, panel mount solution. Designed to meet **MIL-STD-810F** (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, salt mist, dust, fungus, solar radiation etc.), and **MIL-STD-461G-EMC-EMI-EMS-ESD (optional)**, 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: 202422198937.6)

Mechanical Data

Keys:	88 keys (including 2 mouse buttons)
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.8N±0.2N
Gross Weight:	≈ 0.40KG
Dimension:	340.0mm x 108.0mm (Maximum frame size)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≤30mA when backlight is off, ≤300mA with backlight on
Connect Interface:	Dot matrix, USB, PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, (U-cos--To be confirmed).

Reliability

RoHS compliant, CE and FCC certified, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock,temperature shock, rain, salt mist, dust, fungus, solar radiation etc.).	
Protection Level:	IP67 (front panel)
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-40℃ ~ +75℃
Storage Temperature:	-50℃ ~ +80℃
APPLICATION:	Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc.



Part Number: K-TEK-V440KP-FN-BL-SC-DT

Feature

IP54 static rugged scissors rubber dome movable desk 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 CNC aluminum processed housing for movable desktop keyboard version with adjustable slope design at three different operation angles for comfortable operations. The exposed materials of the keyboard meet UL94-HB and the USB cable meets UL1581 VW-1 with 3.0m exposed USB cable length. **The whole keyboard meets EMC: IEC 61000-6-2(2016), IEC 61000-6-4(2018), ESD Level 4: IEC 61000-4-2(2008), performance A.**

Mechanical Data

Keys:	104 keys
Key Travel::	2.00mm ± 0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.50N - 0.80N
Gross Weight:	≈ 2.00KG
Dimension:	440.0mm x 164.0mm x 22.0mm (L x W x H)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	50mA when backlight is off, 300mA with backlight on
Connect Interface:	USB/PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

Reliability

RoHS Compliant, CE and FCC, ESD Level 4: IEC 61000-4-2(2008)	
Protection Level:	IP54 static
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-20℃ ~ +55℃
Storage Temperature:	-30℃ ~ +65℃
APPLICATION:	Industrial, Vehicle, aerospace, naval, defense, nuclear power plant, maritime, Radar, console, portable rugged laptop, UAV ground station, GCS etc.



Part Number: K-TEK-V440KP-FN-BL-SC-PM

Feature

IP54 static rugged scissors rubber dome with CNC top panel mounting 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 CNC aluminum processed top panel plate with sinking holes for top panel mounting. The exposed materials of the keyboard meet UL94-V1 and the USB cable meets UL1581 VW-1 with 3.00m exposed USB cable length. **The whole keyboard meets EMC: IEC 61000-6-2(2016), IEC 61000-6-4(2018), ESD Level 4: IEC 61000-4-2(2008), performance A.**

Mechanical Data

Keys:	104 keys
Key Travel::	2.00mm ± 0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.50N - 0.80N
Gross Weight:	≈1.90KG
Dimension:	440.0mm x 164.0mm (L x W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	50mA when backlight is off, 300mA with backlight on
Connect Interface:	USB/PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

Reliability

RoHS Compliant, CE and FCC, ESD Level 4: IEC 61000-4-2 (2008)	
Protection Level:	IP54 static
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-20℃ ~ +55℃
Storage Temperature:	-30℃ ~ +65℃
APPLICATION:	Industrial, Vehicle, aerospace, naval, defense, nuclear power plant, maritime, Radar, console, portable rugged laptop, UAV ground station, GCS etc.



Part Number: K-TEK-V440TP-KP-FN-BL-SC-DR

Feature

IP54 static rugged scissors rubber dome rack mount keyboard with sealed & rugged touchpad module with 2 mouse buttons, with numeric keypad on the right side and 12 FN keys (F1, F2...F11, F12) on top line for easy operation. With scissors switch technology with 2.0mm±0.2mm long stroke with extremely good tactile feeling for fast and accurate 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 for dim working environment. With NUM Lock/CAPS Lock/Scroll Lock indicators on keyboard surface. The drawer is made of galvanized steel sprayed with black paint to prevent from corrosion and designed with guide rails and self-lock screws for self-lock function and fits for standard 19" rack mounting, the exposed materials of the keyboard meet UL94-V1 and the USB cable meets UL1581 VW-1 with 3.00m exposed USB cable length. **The whole keyboard meets EMC: IEC 61000-6-2(2016), IEC 61000-6-4(2018), ESD Level 4: IEC 61000-4-2(2008), performance A.**

Mechanical Data

Keys:	104 keys + 2 mouse buttons
Key Travel::	2.00mm ± 0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.50N - 0.80N
Gross Weight:	≈7.00KG
Dimension:	Drawer: 437.6mm x 316.0mm x 43.6mm (L x W x H), Touchpad: 111.0mm x 66.0mm (Lx W)

Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	50mA when backlight is off, 300mA with backlight on
Connect Interface:	USB/PS2 optional
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

Reliability

RoHS Compliant, CE and FCC, ESD Level 4: IEC 61000-4-2 (2008)	
Protection Level:	IP54 static
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	-20°C ~ +55°C
Storage Temperature:	-30°C ~ +65°C
APPLICATION:	Industrial, Vehicle, aerospace, naval, defense, nuclear power plant, maritime, Radar, console, portable rugged laptop, UAV ground station, GCS etc.