

# IP54 SCISSORS 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-810H (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. Superior light and comfortable tactile feeling, fast typing experience and will not easily get fatigued
2. When pressing 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
3. MIL-STD-810H-Environmental adaptability, MIL-STD-461G-EMC-EMI-EMS-ESD optional
4. Strong performance at compatibility, consistency and continuity
5. Others
Disadvantages of this series of products
1. Not good at waterproof, and risk of leakage inside the device
2. Non-resistant to prying, scratch, vibration or falling
3. Work well only under high and low temperature from -10°C to +55°C, cannot work under humidity
4. Failed to meet MIL-STD-810H (high and low wide temperature of -40°C to + 75°C, low pressure, humidity, vibration, shock, temperature shock, rain, dust, fungus, solar radiation etc.)
5. Failed to meet the critical military standards in these 7 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability and stability
6. High MOQ leads to increased material procurement costs
7. Others

## ★ Feature and Reliability ★

EMC SPEC	MIL-STD-461G (EMC, EMI, EMS, ESD) -- <b>OPTIONAL</b>
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/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-V249-102-FN-SC-DM

### Feature

IP54 static sealed & ruggedized ABS plastic matrix keyboard, with 12 FN keys on the top line for easy operation, scissors switch technology with key stroke of 1.2mm with long life-span with extremely comfortable tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, which can be used in harsh environments and withstand bacteria etc, built-in panel mounting version.

### Mechanical Data

Keys:	79 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	249.0mm x 101.7mm (Front panel)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop/notebook etc.



Part Number: K-TEK-V271-108-FN-SC-DM

### Feature

IP54 static sealed & ruggedized ABS plastic matrix keyboard, with 12 FN keys on the top line for easy operation, scissors switch technology with key stroke of 1.2mm with long life-span with extremely comfortable tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, which can be used in harsh environments and withstand bacteria etc, built-in panel mounting version.

### Mechanical Data

Keys:	78 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	271.0mm x 108.0mm (Front panel)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop/notebook etc.



Part Number: K-TEK-V275TP-FN-SC-BL-NV-EMC-FDT

### Feature

IP54 static sealed & ruggedized keyboard with integrated sealed & ruggedized touchpad for fast and accurate cursor position. 12 FN keys are on the top line for easy operation. Scissors switch technology with short stroke of 1.20mm, which has a good tactile feeling for fast and accurate data input, without any noise. "FN + CLEAN" combination key for easy cleaning via lock/disable the entire keyboard without taking the keyboard from PC, which can avoid mis-operation during the cleaning procedure. Adjustable industrial backlight (Red/white etc.) included to fit dim conditions, super flat movable desk top with 3 versions of VESA mounting holes included, drain hole on the back to prevent damage of liquids & air inside, built-in top panel mounting optional, designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD).

### Mechanical Data

Keys:	89+2 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Dimension:	297.5mm x 192.0mm x 22.5mm (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
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android

### Reliability

RoHS, CE, FCC, MIL-STD-461G (EMC, EMI, EMS, ESD)	
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-V275TP-FN-BL-SC-DWP

### Feature

IP54 static sealed & ruggedized keyboard, with independent three-proof control board module, with full keyboard functionalities integrated with sealed & ruggedized tough touchpad for fast and accurate cursor position, 12 FN keys are on the top line for easy operation, with the reinforcement of scissors switch technology, 1.20mm key stroke for long life-span with extremely good tactile feeling for fast and accurate data input without any noise, there is no key value missing, no stuck key, no repeated key value output during the keyboard operation. FN + CLEAN combination key for easy cleaning via lock/disable the entire keyboard without needing to take the keyboard from PC, and avoid mis-operation during the cleaning process. Adjustable white or red color industrial backlight included to fit dim conditions, built-in top panel mounting version, USB interface, embedded mounted installation, mountable desktop version optional.

### Mechanical Data

Keys:	89+2 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Dimension:	285.00mm x 179.69mm (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

### Reliability

RoHS, CE, 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-V275TP-FN-SC-BL-NV-EMC

### Feature

IP54 static sealed & ruggedized keyboard with integrated sealed & ruggedized tough touchpad for fast and accurate cursor position. 12 FN keys are on the top line for easy operation. Scissors switch technology with short stroke of 1.20mm, which has a good tactile feeling for fast and accurate data input, without any noise. "FN + CLEAN" combination key for easy cleaning via lock/disable the entire keyboard without taking the keyboard from PC, which can avoid misoperation during the cleaning procedure. Adjustable white/red industrial backlight included to fit dim condition. Built-in top panel mounting version, military level, designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD).

### Mechanical Data

Keys:	89+2 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Dimension:	285.00mm x 179.69mm (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

### Reliability

RoHS, CE, FCC, MIL-STD-461G (EMC, EMI, EMS, ESD)	
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-V275TP-FN-BL-SC-FDT

### Feature

IP54 static rated sealed & ruggedized keyboard with full keyboard functionalities integrated with sealed & ruggedized tough touchpad (touchpad with fingerprint reader included optional) for fast and accurate cursor position, 12 FN keys are on the top line for easy operation, professional scissors switch technology with short stroke of 1.20mm with long life-span with extremely good tactile feeling for fast and accurate data input without any double-type and noise, with FN + CLEAN combination key for easy cleaning via lock/disable the entire keyboard without needing to take the keyboard from PC, and avoid mis-operation during the cleaning process. Adjustable industrial backlight (red/white etc.) included to fit dim conditions, super flat movable desk top with 3 versions of VESA mounting holes, with AMPS holes included, drain hole on the back to prevent damage of liquids & air inside, and built-in top panel mounting optional, USB interface.

### Mechanical Data

Keys:	89+2 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	1.2N±0.2N
Dimension:	297.5mm x 192.0mm x 22.5mm (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
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android

### Reliability

RoHS, CE, 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-V291-FN-BL-SC

### Feature

IP54 static sealed & ruggedized plastic keyboard, with 12 FN keys on the top line for easy operation, scissors switch technology with key stroke of 1.2mm with long life-span with extremely comfortable tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, with white backlight included to fit for dim conditions, which can be used in harsh environments and withstand bacteria etc, built-in panel mounting version, matrix output or USB/PS2 optional.

### Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	290.8mm x 108.1mm (L x W x H)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



Part Number: K-TEK-V291-FN-UT-SC

### Feature

IP54 static sealed & ruggedized plastic keyboard with scissors switch technology, 12 FN keys are on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span 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 repeat key output during the keyboard operation, built-in top panel mounting version, matrix output or USB optional, backlight optional.

### Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	290.8mm x 108.1mm (L x W x H)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



Part Number: K-TEK-V340KP-FN-OEM+TP105-70

### Feature

IP54 static waterproof dust-proof industrial level ABS material ultra thin keyboard with carbon-on-gold PCB, 12 function keys on top line for easy operation, and numeric keypad on the right side, with scissors switch technology with key stroke (1.2mm) 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, panel mounted solution. TP105-70-PS2 is a high performance humanize designed touchpad module especially for Laptops, Notebooks and EPC products. Utilizing capacitive sensing technology to provide accurate cursor motion at X, Y directions through fingers. And send it to the main control chip in the standard PS2 protocol data format, and transmit it to the host computer to realize the complete mouse function. The touchpad module with a reinforced installation structure.

### Mechanical Data

Keys:	98 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	keyboard: 341.0mm x 111.5mm, touchpad: 104.8mm x 70.0mm

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



Part Number: K-TEK-V340KP-FN-OEM

### Feature

IP54 static sealed & ruggedized industrial ultra thin keyboard with 12 function keys on top line for easy operation, and numeric keypad on the right side, matrix output or with industrial carbon-on-gold PCB with USB port optional, industrial level module with Scissors switch technology with key stroke (1.2mm) with extremely good tactile feeling for fast and accurate data input without any noise, panel mounted solution, there will be no key value missing, no stuck key, no repeated key value output during the keyboard operation.

### Mechanical Data

Keys:	98 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	340.80mm x 111.55mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



### Feature

IP54 static sealed & ruggedized industrial ultra thin keyboard with 12 function keys on top line for easy operation, industrial level PCB with Scissors switch technology with long stroke (1.20mm) with extremely good tactile feeling for fast and accurate data input without any noise, with mounting holes on the edge for rear panel mounting, industrial Level.

Part Number: K-TEK-V300-FN-UT-RP

### Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	301.2mm x 117.5mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



### Feature

IP54 static sealed & ruggedized industrial ultra thin keyboard with 12 function keys on top line for easy operation, scissors switch technology with short stroke 1.20mm 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, with numeric keypad on the right side of keyboard for fast and accurate number input. With mounting holes on the edge for rear panel mounting, industrial Level. USB interface or matrix optional.

Part Number: K-TEK-V355KP-FN-SC

### Mechanical Data

Keys:	98 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	355mm x 125mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, FCC	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Portable rugged laptop etc.



Part Number: K-TEK-V385KP-FN-SC-BL

## 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. Built-in panel mounting version, with an external USB controller board for USB interface, with dot matrix/PS2 interface optional. With adjustable white backlight included.

## Mechanical Data

Keys:	104 keys
Key Travel::	2.00±0.0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N±0.8N
Dimension:	385.0mm x 109.0mm (L x W)

## Electrical Data

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

## Reliability

RoHS, CE, 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-V405-38-MTB-AVR-FN-SC-BT

## Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with removable 38.0mm hardened black resin mechanical trackball with 400DI resolutions for fast and accurate cursor position, 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

## Mechanical Data

Keys:	86+3 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	405.0mm x 150.0mm (Front panel)

## Electrical Data

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

## Reliability

RoHS, CE, 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-V405-38-OTB-FN-BT

### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with IP68 dynamic waterproof 38.0mm hardened silver resin optical trackball with 800DI resolutions for fast and accurate cursor position, 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

### Mechanical Data

Keys:	86+3 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	405.0mm x 150.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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-V405TP-FN-SC-BT

### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with fully sealed rugged touchpad with 400DI resolutions for fast and accurate cursor position and left&right mouse buttons, 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version with sinking holes.

### Mechanical Data

Keys:	86 keys + 2 mouse keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	405.0mm x 150.0mm (Front panel)

### Electrical Data

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

### Reliability

RoHS, CE, 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-V418KP-FN-SC-BT

### 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 optional 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. 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::	2.00±0.20mm
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:	≈30mA
Connect Interface:	USB
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
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Industrial, Vehicle, aerospace, naval, nuclear power plant, maritime, Radar display console, portable rugged laptop, UAV ground station etc.



Part Number: K-TEK-V430KP-FN-SC-BL-BT

### 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.

### Mechanical Data

Keys:	104 keys
Key Travel::	2.00±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N±0.8N
Dimension:	430.0mm 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, QNX 6.3.2 operating systems

### Reliability

RoHS Compliant, CE and FCC, ESD Level 4: IEC 61000-4-2 (2008)	
Protection Level:	IP54
MTBF:	>20000H
MTTR:	<30min
Operating Temperature:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Industrial, Vehicle, aerospace, naval, nuclear power plant, maritime, Radar display console, portable rugged laptop, UAV ground station etc.



### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with 34.0mm optical thumb anti-vibration ball with adjustable resolutions (600/800/1200/1600DPI) for fast and accurate cursor position, 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span 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 repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

### Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	440.0mm x 153.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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.



### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with 34.0mm optical thumb ball mouse with 500 - 2000DPI resolutions for fast and accurate cursor position, 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span 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 repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

### Mechanical Data

Keys:	86 keys
Key Travel::	1.20±0.10mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	440.0mm x 153.0mm(L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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-V455-38-MTB-AVR-KP-FN-SC-BT

### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with removable 38.0mm hardened black resin mechanical trackball with 400DI resolutions for fast and accurate cursor position, integrated with numeric keys, and 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

### Mechanical Data

Keys:	98 + 3 keys
Key Travel::	1.20±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	455.0mm x 150.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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-V455-38-MTB-KP-FN-SC-BT

### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with IP65 waterproof 38.0mm hardened black resin mechanical trackball with 400DI resolutions for fast and accurate cursor position, integrated with numeric keys, and 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

### Mechanical Data

Keys:	98 + 3 keys
Key Travel::	1.20±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	455.0mm x 150.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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.



### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with IP68 dynamic waterproof 38.0mm hardened silver resin optical trackball with 800DPI resolutions for fast and accurate cursor position, integrated with numeric keys, and 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

Part Number: K-TEK-V455-38-OTB-KP-FN-BT

### Mechanical Data

Keys:	98 + 3 keys
Key Travel::	1.20±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	455.0mm x 150.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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.



### Feature

IP54 static sealed & ruggedized ABS plastic keyboard with scissors switch technology, with 38.0mm removable mechanical trackball module and 3 mouse buttons, integrated with numeric keys, and 12 FN keys on the top line for easy operation, scissors switch technology with 1.20mm key stroke with long life-span and extremely good tactile feeling for fast and accurate data input without any noise, there will be no key value missing, no stuck key, no repeat key output during the keyboard operation, stainless steel housing with high quality black titanium surface treatment, built-in top panel mounting version.

Part Number: K-TEK-V455-172-38-MTB-AVR-KP-FN-SC-BT

### Mechanical Data

Keys:	98 + 3 keys
Key Travel::	1.20±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.6N±0.2N
Dimension:	455.0mm x 172.0mm (L x W)

### Electrical Data

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

### Reliability

RoHS, CE, 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-V530-38-MTB-AVR-KP-FN-SC-BT

### Feature

IP54 static rugged scissors rubber dome keyboard, with 38.0mm removable mechanical trackball module and 3 mouse buttons, 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 optional 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 top plate with sinking holes for top panel mounting.

### Mechanical Data

Keys:	104+3 keys
Key Travel::	2.00±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N±0.8N
Dimension:	530.0mm x 172.0mm (L x W)

### Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

### Reliability

RoHS Compliant, CE and FCC, ESD	
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-V530-50-MTB-AVR-KP-FN-SC-BT

### Feature

IP54 static rugged scissors rubber dome keyboard, with 50.0mm removable mechanical trackball module and 3 mouse buttons, 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 optional 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 top plate with sinking holes for top panel mounting.

### Mechanical Data

Keys:	104+3 keys
Key Travel::	2.00±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N±0.8N
Dimension:	530.0mm x 172.0mm ( L x W )

### Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

### Reliability

RoHS Compliant, CE and FCC, ESD	
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-V530-OTB-KP-FN-SC-BT

### Feature

IP54 static rugged scissors rubber dome keyboard, with 34.0mm IP52 optical thumb ball mouse and 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 keyvalue missing, no stuck key, no repeated key value output during the keyboard operation. Adjustable white backlight color optional 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 top plate with sinking holes for top panel mounting.

### Mechanical Data

Keys:	104 keys
Key Travel::	2.00±0.20mm
Key Lifespan:	>5 million actuations
Actuation Force:	0.5N±0.8N
Dimension:	530.0mm x 172.0mm ( L x W )

### Electrical Data

Supply Voltage:	DC +5V±5%
Working Current:	≈30mA
Connect Interface:	USB
OS:	All Windows, Linux, Unix, Mac OSX, Vxworks, Android, QNX 6.3.2 operating systems

### Reliability

RoHS Compliant, CE and FCC, ESD	
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-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
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
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:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
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
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
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:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
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-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
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
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:	0°C ~ +45°C
Storage Temperature:	-10°C ~ +55°C
APPLICATION:	Industrial, Vehicle, aerospace, naval, defense, nuclear power plant, maritime, Radar, console, portable rugged laptop, UAV ground station, GCS etc.