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

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# RUGGED KEYBOARD AND MOUSE CATALOGUE

Rugged Keyboards and Mice Expert

# Company Profile

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

CUSTOMER FIRST

INNOVATION TECHNOLOGY

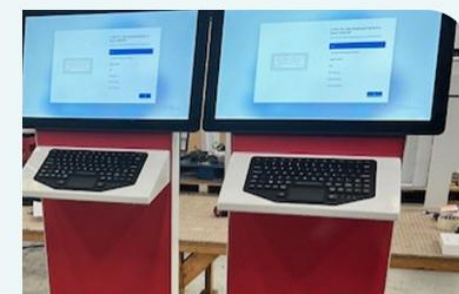CONTINUOUS IMPROVEMENT

QUALITY PRIORITY

TEAM WORK

CREDIT-BASED

LEADING MANUFACTURER

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## 01

## Ultra Rugged Chiclet Keyboard

### Product Application

# ★ Feature and Reliability ★

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

| Environmental Adaptability | MIL-STD-810H (high and low wide temperature (-40°C-+75°C), low pressure (Altitude), humidity, vibration, shock, salt fog, temperature shock, drop, rain, sand & dust, fungus, solar radiation etc.) |
|---|---|
| 01 | Low Pressure (57kPa - 106kPa) |
| 02 | High Temperature (+75℃) |
| 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.

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic waterproof vandal proof aluminum alloy ruggedized military keyboard with durable polymer keys. The high quality ruggedized aluminum alloy panel is processed by CNC. With 12 function keys(F1, F2, ... F12) on the top line of keyboard. Sealed and ruggedized military PCB with carbon-on-gold key switch technology with stroke 1.20mm, which is extremely good tactile feeling for fast and accurate data input without any noise. one complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, Rear panel with countersunk hole for easy mounting. Adjustable backlight included ( White or Red etc). FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or mistyping.The whole keyboard can meet wide temperature (Operating temperature: -40℃ to +75℃). High quality durable black titanium spray-paint on the aluminum alloy panel. The whole keyboard can designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

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

## Mechanical Data

| Keys: | 86 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.40KG |
| Dimension: | 270.0mm(L) x 110.0mm(W) (Top Panel) |

## Electrical Data

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

## Reliability

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

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic sealed and rugged durable compact embedded chiclet keyboard with polymer keys,external with fully sealed independent waterproof wide-temperature touchpad for fast cursor position and 2 mouse buttons for left/right clicking.With numeric keypad on the right side of keyboard and 12 function keys(F1, F2, ... F12) on the top line for easy operation, which is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB, with carbon-on-gold key switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or mistyping. Adjustable white backlight included, Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M270-FN-BL-IT-NV-151B-DWP+TP80-DML+2KEY

## Mechanical Data

| Keys: | 86+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.90KG |
| Dimension: | Keyboard: 270.0mm x 110.0mm (Front Panel), Touchpad: 81.0mm x 50.0mm (L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

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

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

## Feature

IP68 dynamic water proof vandal proof rugged military chiclet keyboard with durable polymer keys, integrated touchpad and military grade PCB,12 function keys(F1, F2, ... F12) are on the top line. Carbon-on-gold key switch technology with(1.20mm± 0.10mm)key travel with extremely good tactile feeling for fast and accurate data input without any noise. The whole keyboard is made of CNC aluminum alloy front plate + PC key caps + carbon-on-gold key switch technology with military PCB. Movable stand alone Desk Top Version. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation and mis-typing. Which is good for outdoor application with direct rain and very harsh environments with humidity, much dynamic water, oil, salt mist etc. Adjustable white backlight included, with USB interface. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327TP-FN-BL-NV-151B-DT-DWP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP65 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Mechanical Data

| | |
|---|---|
| Keys: | 86+2 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.00KG |
| Dimension: | 348.0mm x 132.0mm x(8.1mm~ 18.6mm) （L x W x H) |

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP68 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof ultra thin military chiclet keyboard with durable polymer keys and combine with compact sealed touchpad with 2 mouse buttons for left/right clicking. 12 function keys F1, F2, ... F12 are on the top of keyboard and numerical keypad are on the right part of keyboard. The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with (1.20±0.10mm) key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327KP-FN-BL-NV-151B-DWP+M73TP

## Mechanical Data

| Keys: | 101 + 2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm (L x W), Touchpad: 73.0mm x 76.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof ultra thin military chiclet keyboard with durable polymer keys and combine with compact sealed touchpad with 2 mouse buttons for left/right clicking.12 function keys F1, F2, ... F12 are on the top of keyboard and numerical keypad are on the right part of keyboard. The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with (1.20±0.10mm) key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327KP-FN-BL-NV-151B-DWP+M125TP

## Mechanical Data

| Keys: | 101 + 2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm (L x W), Touchpad: 124.6mm x 97.6mm(L x W) |

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof ultra thin military chiclet keyboard with durable polymer keys and combine with compact sealed touchpad with 2 mouse buttons for left/right clicking.12 function keys F1, F2, ... F12 are on the top of keyboard and numerical keypad are on the right part of keyboard. The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with (1.20±0.10mm) key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327KP-FN-BL-NV-151B-DWP+M127TP

## Mechanical Data

| Keys: | 101 + 2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm (L x W), Touchpad: 126.6mm x 99.6mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof rugged military chiclet keyboard with durable polymer keys.Integrated stepped aluminum alloy panel is processed by CNC. An additional black silicon gasket goes along with the top panel for easy mounting & sealing with cabinet. 12 function keys F1, F2, ... F12 are on top line of keyboard and numerical keypad at the right side of keyboard. Military grade PCB with carbon-on-gold key switch technology with key stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise. It is made of CNC aluminum alloy front plate + PC keycaps + military grade PCB, High quality durable black titanium spray-paint on the aluminum alloy panel, Rear panel with mounting hole for rear panel mounting. Adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and prevent misoperation or typo. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), which is good for outdoor application with direct rain and harsh environments with humidity, much dynamic water, oil, salt mist etc.

Part Number: K-TEK-M338-122KP-FN-BL-NV-151B-DWP

## Mechanical Data

| Keys: | 101keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | 338.0mm x 122.0mm ((L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

Part Number: K-TEK-M334KP-FN-BL-IT-NV-151B-DWP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |



## Feature

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

Part Number: K-TEK-M334KP-FN-BL-IT-NV-151B-DWP+M73TP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof rugged military chiclet keyboard with durable polymer keys and combine with ergonomic 34.0mm optical trackball module with 400~1000 DPI resolutions for fast and accurate fixing cursor position with extreme smooth operation without any noise. Integrated stepped aluminum alloy panel is processed by CNC. An additional black silicon gasket goes along with the top panel for easy mounting & sealing with cabinet. 12 function keys F1, F2, ... F12 are on top line of keyboard and numerical keypad at the right side of keyboard. Military grade PCB with carbon-on-gold key switch technology with key stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise. It is made of CNC aluminum alloy front plate + PC keycaps + military grade PCB, High quality durable black titanium spray-paint on the aluminum alloy panel, Rear panel with mounting hole for panel mounting. Adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and prevent misoperation or typo. Designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), which is good for outdoor application with direct rain and harsh environments with humidity, much dynamic water, oil, salt mist etc.

Part Number: K-TEK-M338KP-129-OTB-FN-BL-NV-151B-DWP

## Mechanical Data

| | |
|---|---|
| Keys: | 101 keys, durable and robust polymer keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key: 1.0N±0.2N, Enter/Caps Lock/Shift/Tab/Backspace Key: 1.5N±0.2N |
| Gross Weight: | ≈1.80KG |
| Dimension: | 338.0mm x 122.0mm (front panel) 129.0mm x 174.0mm(top panel) |

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP65 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof stainless steel military chiclet keyboard with durable polymer keys, with IP65 static anti-vibration and removable 38mm mechanical trackball module with 400 DPI resolutions, with 12 function keys F1, F2, ... F12 on the top of keyboard, sealed and ruggedized Military grade PCB with carbon-on-gold key switch technology with stroke(1.20mm± 0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, one complete silicone rubber along the rear stainless steel plate for easy mounting & sealing tightly with cabinet, front panel with thread bolts for top panel mounting. High quality durable black titanium electroplated on the top stainless steel plate. Red/white backlight is included. Aviation plug with USB interface or direct USB interface is available. The whole keyboard and trackball part can meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide working temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, drop, rain, sand and dust, fungus, solar radiation etc.).It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc.

Part Number: K-TEK-M350-38-MTB-FN-BL-NV-151B

## Mechanical Data

| | |
|---|---|
| Keys: | 89+3 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 390.0mm x 145.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP65 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic sealed and rugged compact chiclet military keyboard with durable polymer keys. With military IP65 static 38.0mm black harden resin mechanical trackball module (stainless steel trackball is optional)in 400-1000 DPI resolutions for fast and accurate cursor movement. 12 function keys F1, F2, ... F12 are on the top line of keyboard. It is made of CNC Aluminum Alloy front plate + PC keycaps + military grade PCB, Carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, FN +CLEAN combination keys to lock/disable keyboard for easy cleaning without taking away the keyboard from PC. Adjustable white backlight included. Secure the keyboard to the customer's device using a high-strength adhesive（Top panel with mounting holes or thread bolts are available). Dual USB interface.High quality durable black titanium spray-paint on the aluminum alloy panel. It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc. The whole keyboard and trackball part can meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration,shock, temperature shock, rain,dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety,maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency and continuity.

**Part Number: K-TEK-M350-38-MTB-FN-BL-NV-151B**

## Mechanical Data

| | |
|---|---|
| Keys: | 86+3 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 350.0mm x 116.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP65 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof stainless steel military chiclet keyboard with durable polymer keys, with IP65 static anti-vibration and removable 38mm mechanical trackball module with 400 DPI resolutions, with 12 function keys F1, F2, ... F12, sealed and ruggedized Military grade PCB with carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, one complete silicone rubber along the rear stainless steel plate for easy mounting & sealing tightly with cabinet, front panel with thread bolts for top panel mounting. Red/white backlight is included. Aviation plug with USB interface or direct USB interface is available. The whole keyboard and trackball part can meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide working temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, drop, rain, sand and dust, fungus, solar radiation etc.).It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc.

**Part Number: K-TEK-M390-MTB-AVR-FN-BL-NV-151B-DWP**

## Mechanical Data

| | |
|---|---|
| Keys: | 89+3 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key: 1.0N±0.2N, Enter/Caps Lock/Shift/Tab/Backspace Key: 1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 390.0mm x 145.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| | |
|---|---|
| Protection Level: | IP65 |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +60℃ |
| Storage Temperature: | -45℃ ~ +65℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic sealed and rugged compact chiclet military keyboard with durable polymer keys. With military IP65 static 38.0mm black harden resin mechanical trackball module(stainless steel trackball is optional)in 400 DPI resolutions for fast and accurate cursor movement. 12 function keys F1, F2, ... F12 are on the top line of keyboard. It is made of stainless steel front plate + PC keycaps + military grade PCB, Carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, FN +CLEAN combination keys to lock/disable keyboard for easy cleaning without taking away the keyboard from PC. Adjustable backlight included (Red or white).Stainless steel front plate with sealing gasket and threaded bolts for top panel mounting solution. Aviation plug or USB interface optional. It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc. The whole keyboard and trackball part can meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration,shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency and continuity.

Part Number: K-TEK-M390-MTB-FN-BL-NV-151B-DWP

## Mechanical Data

| Keys: | 89+3 keys |
| --- | --- |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key: 1.0N±0.2N, Enter/Caps Lock/Shift/Tab/Backspace Key: 1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 390.0mm x 145.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

Part Number: K-TEK-M390-MTB-FN-BL-NV-151B-DT-DWP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

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

Part Number: K-TEK-M390-MTB-FN-BL-NV-151B-BT-DWP

### Mechanical Data

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

### Electrical Data

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

### Reliability

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

| Optional Configuration | Part Number | Remark |
|---|---|---|
| | K-TEK-M390-MTB-FN-BL-NV-151B-BT-DT-DWP- | Keyboard with trackball |
| | K-TEK-M390-MTB-FN-BL-NV-151B-BT-DT-DWP- | Flat desktop version |
| | K-TEK-M390TP-FN-BL-NV-151B-BT-DWP | Keyboard with touchpad |
| | K-TEK-M390TP-FN-BL-NV-151B-BT-DT-DWP | Flat desktop version |

## Feature

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

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

### Mechanical Data

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

### Electrical Data

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

### Reliability

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

## Feature

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

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

### Mechanical Data

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

### Electrical Data

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

### Reliability

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

## Feature

IP65 dynamic waterproof vandal proof aluminum alloy rugged military keyboard with durable polymer keys.The high quality rugged aluminum alloy panel is processed by CNC and keyboard with military grade PCB meets with IEC60945-2002 EMC and environmental adaptability test, with 12 function keys F1, F2,...F12 on the top line, integrated with IPX6 rated ergonomic 34mm optical trackball module with 500 CPI resolutions for fast and accurate fixing cursor position with extreme smooth operation without any noise. The whole keyboard is made of CNC aluminum alloy front plate+ PC keycaps + carbon contact as well as military grade PCB. Carbon-on-gold key switch technology with 1.20±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise. FN + Clean combination keys for easily cleaning without taking the keyboard away from PC. The whole keyboard can meet wide temperature (Operating temperature: -40℃ to +75℃). High quality durable black titanium spray-paint on the aluminum alloy panel. Front panel with sinking holes for the top panel mounting. Adjustable backlight included(White or Red). USB interface or aviation plug are available.Designed to meet IEC60945-2002, MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M440-OTB-FN-BL-NV-151B-DWP-AL

## Mechanical Data

| Keys: | 86 keys |
| --- | --- |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 440.0mm x 153.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| Protection Level: | IP65 |
| --- | --- |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP68 dynamic water proof vandal proof stainless steel military chiclet keyboard with durable polymer keys,with 12 function keys F1, F2,...F12 on the top line, integrated with IPX6 rated ergonomic 34mm optical trackball module with 500CPI resolutions for fast and accurate fixing cursor position with extreme smooth operation without any noise, with 3 mouse buttons for left/right clicking, as well as middle wheel for scrolling function. Ruggedized military grade PCB with carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium electroplate on the whole keyboard housing, one complete silicone rubber along stainless steel plate for easily mounting and sealing tightly with cabinet , FN + CLEAN combination keys for easily cleaning without taking the keyboard away from PC. Movable stand alone DESK TOP VERSION. Adjustable red backlight included. Dual USB interface, which meets IEC60945-2002, designed to meet MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H(high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M440-OTB-FN-BL-NV-151B-BT-DT-DWP

## Mechanical Data

| Keys: | 89 keys |
| --- | --- |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 440.0mm x 153.0mmx26.0mm(L x W) |

## Electrical Data

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

## Reliability

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

| Protection Level: | IP68 |
| --- | --- |
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic waterproof vandal proof aluminum alloy rugged military chiclet keyboard with durable polymer keys.The high quality rugged aluminum alloy panel is processed by CNC. Keyboard with military grade PCB meets with IEC60945-2002 EMC and environmental adaptability test, with 12 function keys F1, F2,...F12 on the top line and numerical keypad at the right side of keyboard, Integrated with IPX6 rated ergonomic rugged military anti-vibration and removable 34.0mm optical thumb ball mouse(500 CPI resolutions) for fast and accurate cursor position. The whole keyboard is made of CNC aluminum alloy front plate+ PC keycaps + carbon contact as well as military grade PCB. Carbon-on-gold key switch technology with 1.20±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise. FN + CLEAN combination keys for easily cleaning without taking the keyboard away from PC. The whole keyboard can meet wide temperature (Operating temperature: -40℃ to +75℃). High quality durable black titanium spray-paint on the aluminum alloy panel. Rear panel with mounting holes for panel mounting. Adjustable white backlight included. Dual USB interface.Designed to meet IEC60945-2002, MIL-STD-461G (EMC, EMI, EMS, ESD) and MIL-STD-810H(high and low wide temperature, low pressure, humidity, vibration, shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M450-OTB-AVR-KP-FN-BL-NV-151B-DWP

## Mechanical Data

| Keys: | 101 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 450.0mm x 150.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

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

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

# ★ Feature and Reliability ★

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

| 01 | Reliability |
|----|-------------|
| 02 | Safety |
| 03 | Maintainability |
| 04 | Testability |
| 05 | Supportability |
| 06 | Environmental Adaptability |
| 07 | Stability |
| 08 | Compatibility |
| 09 | Consistency |
| 1 0 | Continuity |

| Environmental Adaptability | MIL-STD-810H (high and low wide temperature (-40°C-+75°C), low pressure (Altitude), humidity, vibration, shock, salt fog, temperature shock, drop, rain, sand & dust, fungus, solar radiation etc.) |
|----|-----------------------------------------------------|
| 01 | Low Pressure (57kPa - 106kPa) |
| 02 | High Temperature (+75℃) |
| 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) |

## Feature

IP54 static rated waterproof rugged durable embedded military mechanical keypad, with built-in integrated military grade PCB. 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 comfortable tactile feeling for fast and accurate data input, with durable coating & antimicrobial surface, which can be used in harsh environments to well withstand bacteria, with 4 sinking holes for top panel mount to user's device. With green backlight included. Designed to meet MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.) and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), 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-M129KP-MA-BL-ML

## Mechanical Data

| Keys: | 24 keys |
|-------|---------|
| Key Travel: | 0.40±0.40mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | 0.55N±0.15N |
| Gross Weight: | ≈0.50KG |
| Dimension: | 129.0mm x 172.0mm(L x W) |

## Electrical Data

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

## Reliability

| CE/FCC/ROHS, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, 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, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic sealed and rugged durable embedded chiclet keyboard with polymer keys and combine with compact ruggedized touchpad with 2 mouse buttons for left/right clicking. 12 function keys (F1, F2...F11, F12) are on the top line for easy operation.Carbon-on-gold key switch technology with(1.20±0.10)mm key travel with extremely good tactile feeling for fast and accurate data input without any noise.The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB. Durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment, rear panel mounted with mounting holes for rear panel mounting. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid misoperation or mistyping. Adjustable white backlight included, Designed to meets MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M270-FN-BL-IT-ML-DWP+M73TP

### Mechanical Data

| Keys: | 86+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.70KG |
| Dimension: | Keyboard: 270.0mm x 110.0mm (L x W);  Touchpad: 73.0mm x 76.0mm(L x W) |

### Electrical Data

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

### Reliability

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

## Feature

IP65 dynamic sealed and rugged durable embedded chiclet compact keyboard with polymer keys, 12 function keys (F1, F2, ...F11, F12) are on the top line for easy operation. Carbon-on-gold key switch technology with (1.20mm±0.10mm)key travel with extremely good tactile feeling for fast and accurate data input without any noise.The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as military grade PCB. Durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes for rear panel mounting. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC to avoid misoperation or mistyping. Adjustable white backlight included, Designed to meets MIL-STD-810F (wide temperature, shock, salt mist, vibration, fungus, humidity etc.), and MIL-STD -461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M270-FN-BL-IT-ML-DWP

### Mechanical Data

| Keys: | 86 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.65KG |
| Dimension: | 270.0mm x 110.0mm(L x W) |

### Electrical Data

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

### Reliability

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

## Feature

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

Part Number: K-TEK-M275TP-FN-BL-ML-DWP

## Mechanical Data

| Keys: | 91+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.70KG |
| Dimension: | 285.0mm x 179.7mm(L x W) |

## Electrical Data

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

## Reliability

CE/FCC/ROHS, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.)

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof ultrathin chiclet keyboard with durable polymer keys, sealed and ruggedized touchpad with 2 mouse buttons for left/right clicking. With 12 function keys (F1, F2, ...F11, F12) on top of keyboard, the whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, top panel mounted solution, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC to avoid mis-operation or mis-typing. Designed to meet MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity).

Part Number: K-TEK-M282-122-FN-BL-IT-ML-DWP+M73TP

## Mechanical Data

| Keys: | 86+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key: 1.0N±0.2N, Enter/Caps Lock/Shift/Tab/Backspace Key: 1.5N±0.2N |
| Gross Weight: | ≈0.80KG |
| Dimension: | Keyboard:282.0mm x 122.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W) |

## Electrical Data

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

## Reliability

CE/FCC/ROHS, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.)

| Protection Level: | IP65 |
|---|---|
| MTBF: | >20000H |
| MTTR: | <30min |
| Operating Temperature: | -40℃ ~ +75℃ |
| Storage Temperature: | -45℃ ~ +85℃ |
| APPLICATION: | Vehicle, aerospace, naval, defense, maritime, Radar, console, portable rugged laptop, notebook, UAV ground station, GCS etc. |

## Feature

IP65 dynamic water proof vandal proof aluminum alloy ruggedized military standard wide temperature keyboard with durable polymer keys. The high quality ruggedized aluminum alloy top panel is processed by CNC. with 12 function keys (F1, F2, ...F11, F12,) sealed and PCB with carbon-on-gold key switch technology with stroke 1.20mm with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium spray-paint on the aluminum alloy panel, stainless steel back plate . Adjustable white backlight included . FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC and avoid mis-operation or mis-typing. It is good for outdoor application with direct rain and very harsh environments with humidity, much dynamic water, oil, salt mist etc. Designed to meet with MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M285TP-FN-BL-ML-DWP

## Mechanical Data

| | |
|---|---|
| Keys: | 90+2 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.70KG |
| Dimension: | 285.0mm x 179.7mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

Part Number: K-TEK-M327KP-FN-BL-IT-ML-DWP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof rugged chiclet keyboard with durable polymer keys, sealed and ruggedized touchpad with 2 mouse buttons for left/right clicking. With 12 function keys (F1, F2, ...F11, F12,) and individual numeric keypad on the right part, the whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meets MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards:reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, andcontinuity.).

Part Number: K-TEK-M327KP-FN-BL-IT-ML-DWP + M125TP

## Mechanical Data

| Keys: | 101 + 2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm(L x W); Touchpad:124.6mm x 97.6mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof ultrathin chiclet keyboard with durable polymer keys, sealed and ruggedized touchpad with 2 mouse buttons for left/right clicking. With 12 function keys (F1, F2, ...F11, F12,) and individual numeric keypad on the right part, the whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with 1.20mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meets MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, andcontinuity.).

Part Number: K-TEK-M327KP-FN-BL-IT-ML-DWP + M73TP

## Mechanical Data

| Keys: | 101 + 2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof rugged chiclet keyboard with durable polymer keys, with ultra-thin military grade dot matrix PCB and semi-reinforced ultra-thin rugged aluminum alloy back plate. With 12 function keys F1, F2, ... F12 on the top of keyboard and individual numeric keypad on the right side of keyboard for easy operation. The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps with carbon-on-gold key switch technology+military grade dot matrix PCB. With 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise,with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mistyping. Designed to meets MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

Part Number: K-TEK-M327KP-FN-BL-DM-DWP

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof rugged chiclet keyboard with durable polymer keys, external with fully individual sealed waterproof wide-temperature touchpad for fast cursor position and 2 mouse buttons for left/right clicking. With 12 function keys F1, F2, ... F12 on the top of keyboard and numeric keypad on the right side of keyboard, the whole keyboard is made of CNC aluminum alloy front plate + PC keycaps + carbon contact as well as integrated military grade PCB, carbon-on-gold key switch technology with 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise, with durable coating & anti-microbial keyboard surface withstand to most chemicals and liquids under harsh environment, rear panel mounted with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mis-typing. Designed to meet MIL-STD-810H (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.

Part Number: K-TEK-M327KP-FN-BL-IT-ML-DWP+TP80-DML-DWP+2KEY

## Mechanical Data

| Keys: | 101+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈1.20KG |
| Dimension: | Keyboard:327.0mm x 111.0mm (Front Panel) , Touchpad: 81.0mm x 50.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

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

**Part Number: K-TEK-M334KP-FN-BL-ML-DWP**

## Mechanical Data

| Keys: | 101 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.70KG |
| Dimension: | 334.0mm x 118.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof aluminum alloy ruggedized military keyboard with sealed touchpad with 2 mouse buttons, with durable polymer keys. The high quality ruggedized aluminum alloy top panel is processed by CNC, with 12 function keys (F1, F2...F11, F12) sealed and ruggedized Military grade PCB with carbon-on-gold key switch technology with key stroke 1.20mm with extremely good tactile feeling for fast and accurate data input without any noise, high quality durable black titanium spray-paint on the aluminum alloy panel , one complete silicone rubber along the top panel for easy mounting & sealing tightly with cabinet, front panel with countersunk hole for easy top panel mounting. Adjustable white backlight included. FN + CLEAN combination keys for easy cleaning, and avoid mis-operation or mis-typing. Designed to meet with MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

**Part Number: K-TEK-M334KP-FN-BL-ML-DWP + M73TP**

## Mechanical Data

| Keys: | 101+2 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈0.75KG |
| Dimension: | Keyboard:334.0mm x 118.0mm(L x W); Touchpad:73.0mm x 76.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic water proof vandal proof rugged chiclet keyboard with durable polymer keys, with ultra-thin military grade dot matrix PCB and semi-reinforced ultra-thin rugged aluminum alloy back plate. With 12 function keys F1, F2, ... F12 on the top of keyboard and individual numeric keypad on the right side of keyboard for easy operation. The whole keyboard is made of CNC aluminum alloy front plate + PC keycaps with carbon-on-gold key switch technology+military grade dot matrix PCB.With 1.20mm±0.10mm key travel with extremely good tactile feeling for fast and accurate data input without any noise,with durable coating & anti-microbial keyboard surface withstand most chemicals and liquids under harsh environment, Top panel with mounting holes, adjustable white backlight included. FN + CLEAN combination keys for easy cleaning without taking the keyboard away from PC, and avoid mis-operation or mistyping. 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.), and MIL-STD-461G-EMC-EMI-EMS-ESD (optional), as well as military standards: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency, and continuity.

**Part Number: K-TEK-M334KP-FN-BL-AC-DWP**

## Mechanical Data

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

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic sealed and rugged durable compact chiclet keyboard with polymer keys. With IP65 static 38.0mm black harden resin mechanical trackball module(stainless steel trackball is optional) in 400 DPI resolutions for fast and accurate cursor movement. 12 function keys F1, F2, ... F12 are on the top line of keyboard. It is made of stainless steel front plate + PC keycaps + carbon contact as well as military grade PCB, Carbon-on-gold key switch technology with stroke(1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, FN + CLEAN combination keys to lock/disable keyboard for easy cleaning without taking away the keyboard from PC. Adjustable backlight included (Red or white).Stainless steel front plate with sealing gasket and threaded bolts for top panel mounting solution. It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc. Designed to meet MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration,shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency and continuity.

**Part Number: K-TEK-M390-MTB-FN-BL-ML-DWP**

## Mechanical Data

| Keys: | 92+3 keys |
|---|---|
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 390.0mm x 145.0mm(L x W) |

## Electrical Data

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

## Reliability

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

## Feature

IP65 dynamic sealed and rugged durable compact chiclet keyboard with polymer keys. With IP65 static 38.0mm black harden resin mechanical trackball module(stainless steel trackball is optional) in 400 DPI resolutions for fast and accurate cursor movement. 12 function keys F1, F2, ... F12 are on the top line of keyboard. It is made of stainless steel front plate with black titanium plating + PC keycaps + carbon contact as well as military grade PCB, Carbon-on-gold key switch technology with stroke (1.20mm±0.10mm) with extremely good tactile feeling for fast and accurate data input without any noise, FN + CLEAN combination keys to lock/disable keyboard for easy cleaning without taking away the keyboard from PC. Adjustable backlight included (Red or white).Super quality durable black titanium electroplated stainless steel front plate with sealing gasket and threaded bolts for top panel mounting solution. It is good for outdoor application with direct rain and very harsh environments with humidity,much dynamic water, oil, dirt, salt mist etc. Designed to meet MIL-STD-810H (high and low wide temperature, low pressure, humidity, vibration,shock, temperature shock, rain, dust, salt mist, fungus, solar radiation etc.), as well as the critical military standards in these 10 aspects: reliability, safety, maintainability, testability, supportability, environmental adaptability, stability, compatibility, consistency and continuity.

Part Number: K-TEK-M390-MTB-FN-BL-BT-ML-DWP

## Mechanical Data

| | |
|---|---|
| Keys: | 92+3 keys |
| Key Travel: | 1.20±0.10mm |
| Key Lifespan: | >5 million actuations |
| Actuation Force: | Normal Key:1.0N±0.2N,Enter/Caps Lock/Shift/Tab/Backspace Key:1.5N±0.2N |
| Gross Weight: | ≈2.50KG |
| Dimension: | 390.0mm x 145.0mm(L x W) |

## Electrical Data

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

## Reliability

| | |
|---|---|
| CE/FCC/ROHS, MIL-STD-810F (high and low wide temperature, low pressure, humidity, vibration, shock, salt spray, temperature shock, rain, dust, fungus, solar radiation etc.) | |
| Protection Level: | IP65 |
| MTBF: | >20000H |
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