

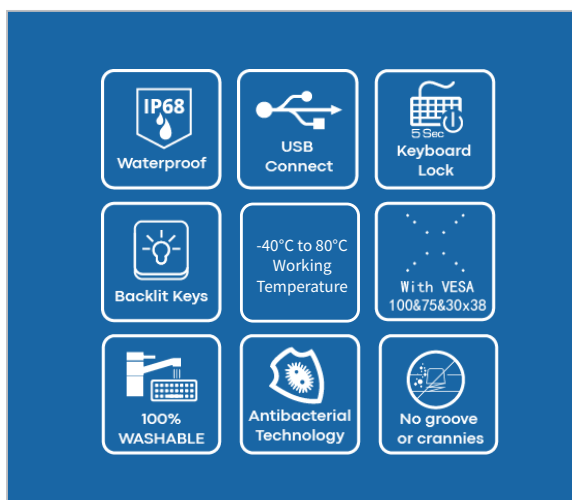
# Sealed IP68 USB Keyboard

DT Research's rugged military-grade keyboards are designed to withstand extreme conditions that typical consumer-grade keyboards cannot endure. These keyboards are built to meet strict military standards, ensuring that they can resist shocks, vibrations, moisture, dust, and temperature fluctuations. The materials used in their construction are reinforced, providing added durability and longevity. One of the most critical features of these keyboards is their ability to operate in a wide range of environments. Whether in a vehicle subjected to constant movement or in outdoor settings exposed to the elements, these keyboards are engineered to perform reliably. With sealed designs and high-quality components, they are less prone to failure, making them ideal for use in demanding applications.



## Features

- IP68 Grade dustproof and waterproof
- Integrated touchpad can replace the mouse and save more space
- With coiled tension relief USB cable
- Integrated holder slot (Supports most international interface brackets)
- With adjustable red backlit
- With multiple installation fixed interfaces: VESA 100, VESA 75, AMPS 30x38mm holes x 4
- FN + CLEAN combination key for easy cleaning by lock/disable the entire keyboard without needing to take the keyboard from PC, avoid mis-operation during cleaning process
- With MIL-STD durability (wide temperature, shock, vibration, humidity)



## Specifications

Mechanical Data	
Keyboard Dimensions (H x W x L)	L: 297.80 ± 0.5mm ( 11.72") W: 191.50 ± 0.5mm ( 7.55") H: 26.50 ± 0.5 mm ( 1.04")
Touchpad Dimensions (W x L)	L: 74 ± 0.5 mm ( 2.91") W: 42 ± 0.5 mm ( 1.65")
Color	Black
Weight	About 980g (2.16 lbs)
Material	Silicone keyboard and ABS Housing
Surface Treatment	Spray ink + laser-engraved characters + PU coating
Keys	US
Key Top Style	Protuberant rectangular keys with tactile feeling
Key Technology	Carbon-on-Gold contact
Key Size	16.0mm x 16.0mm for normal keys, 37.0mm x 16.0mm for enter key, 120.0mm x 16.0mm for space bar key
Key Travel	2.0mm± 0.2 mm
Key Operating Force	85g for normal keys, 90g for enter key, 95g for space bar key
Rebound Time	MAX 8ms
Return Force	≥ 40g
Switch Life	More than 10 million operations
Cable Length	Standard 1.8m coiled tension relief USB cable
Electrical Data	
Interface	USB-A
Supply Voltage	4.75V-5.25V
Current Rating	≤200mA
EMC Standard	EN60601-1
Backlit	Red color
OS	All Windows, Linux, Unix, macOS, VxWorks, Android (μC/OS – to be confirmed)
LED indicator status	Num Lock green LED indicator status: On: enabled Off: disabled Caps Lock green LED indicator status: On: uppercase Off: lowercase Scroll Lock green LED indicator status: On: enabled Off: disabled
Environmental Adaptability	
Temperature	Operating temperature: -40°C to 80°C Storage temperature: -40°C to 85°C
Humidity	0% to 100% non-condensing
Atmospheric Pressure	60-106Kpa
Saline Mist	96 hours, IEC 60512-6

Reliability Parameters	
Coating Adhesion Test	Cross-cut method, 3M610 # tape 3 times -5B
Wear Resistance Test	RCA, 175g force -28 times/20um
Alcohol Resistance Test	95% Ethanol, 500g Positive pressure, Travel friction machine, Travel 16mm, Speed 68 cycles/min -50 cycles without abnormalities
Saline Mist Test	96 hours, IEC 60512-6
Weather Resistance Test	Ultraviolet irradiation - light energy of 250 $\mu$ W/cm <sup>2</sup> -300 hours without abnormalities
Waterproof Test	IP68
High Temperature Test	Time: 96h Temperature: 85 $\pm$ 2°C, Humidity: 0% to 100% non-condensing
Low Temperature Test	Time: 96h Temperature: -40 $\pm$ 2°C
Moisture Test	Time: 96h Temperature: 40 $\pm$ 2°C, Humidity: 0% to 100% non-condensing
Thermal Cycle Test	Temperature: -40 $\pm$ 2°C for 1 hour and then 85 $\pm$ 2°C for 1 hour Times of cycles: 15 cycles/sec 27 cycles without abnormalities
Keyboard Lifespan Test	Load: 80gf vertical pressure Speed: 30 times per minute Times of keystrokes: Min ten million
Keys Life Test	Test frequency: 3 cycles/sec Operating force: 90gf Max Lifespan times: 10 million cycles
Package Drop Test	Times of drops: 6 times Drop height: 60 $\pm$ 5cm Direction: Once in each of the six directions Drop surface: Plastic floor tile
Certificate	CE, FCC, RoHS, IP68
Warranty	1 year
Applications	Material Handling: mobile keyboard, data entry, assembly line etc. Industrial: Industrial automation, pharmaceutical, oil and gas, food and beverage, clean or dirty manufacturing environments, warehouses Military: Vehicle, aerospace, naval, defense, maritime, radar, console, portable, rugged laptop, UAV ground station etc.

\* Specifications subject to change without notice.