



An Affiliate of ELECTRO SWITCH

# KIO76U6 Medical Keyboard

NEMA 4 (IP66) MEDICAL / CLEANROOM KEYBOARD

## KIO76U6 USB MEDICAL KEYBOARD WITH MEDICAL MOUSE

CTI's KIO76U6 Plug-n-Play Medical / Cleanroom Keyboard is comprised of a durable Printed Circuit Board (PCB), a rubber silicone Elastomer, the Orbital Mouse® (Button Style Cursor Controller), a stainless steel enclosure, and a USB cable. The PCB is designed for protection against electromagnetic and radio frequency interference as well as electro static discharges. Upon the PCB is a layer of hard plated gold used for the switching contacts of the Keys. Molded under the Key of the Elastomer are four hard carbon pill contacts which provide reliability and durability. This Elastomer features a time tested durometer that provides an ergonomic key stroke with excellent tactile feedback. It also includes a molded special O-Ring which compresses to ensure a watertight seal. In addition, the Elastomer has been treated with a thermally infused silicone ink to create the QWERTY legend and then molecularly sealed through a Parylene "C" coating process in a gas chamber. Ensuring a watertight seal, this keyboards is encased in the finest grade stainless steel enclosure.

The NEMA 4X (IP66) sealed Medical / Cleanroom Keyboard is most suitable for critical applications requiring high durability (10M+ cycles), high reliability (99.999% availability), and/or ensured performance under extreme operating temperatures, exposure to harsh climate conditions, and/or solid and liquid contaminants. It's well protected against high vibration, EMI/RFI signals, bio-hazardous agents, and cleaning solvents. The stainless steel threaded inserts on the bottom plate allows for affixing to a panel or desktop.

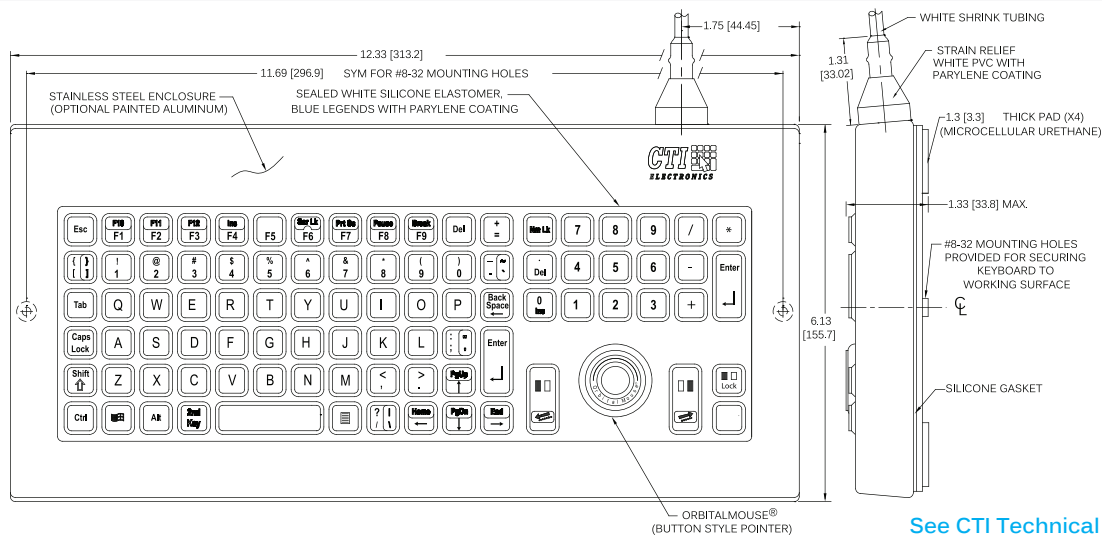
This Plug-n-Play Medical / Cleanroom Keyboard offers the Commercial End User a hygienic keyboard that can be confidently installed with an assurance of high reliability, long term durability, and performance under harsh conditions. Applications include mitigating infection control in healthcare facilities or managing exposure and/or contamination control in chemical, biological, pharmaceutical, science research laboratories, semiconductor, lithography, and manufacturing facilities. The combined features of the Plug-n-Play Medical / Cleanroom Keyboard meet and/or exceed industry standards specifications.

## KIO76U6 TECHNICAL DRAWINGS

761869

[KIO76U6 OEM Medical Keyboard with OrbitalMouse® Pointer](#)

## KIO76U6 MEDICAL KEYBOARD WITH MEDICAL MOUSE TECHNICAL DRAWING



[See CTI Technical Drawing 761869](#)

## KIO76U6 MEDICAL KEYBOARD ORBITAL MOUSE® PATENT

U.S.A. PATENTS [7,499,032](#) U.S.A. PATENT PENDING [12/344368](#)

performance

durability

reliability



• Shown above KIO76U6 Medical Keyboard with OrbitalMouse®

## KIO76U6 STANDARD FEATURES

- NEMA 4X (IP66) sealed
- Standard Operating Temperature -40°C to 80°C (-40°F to 176°F)
- High reliability and durability (MTBF 100,000+ hours, 10,000,000+ deflections)
- Orbital Mouse® patented design has 8 cursor speed settings
- Key contacts are comprised of a thick layer of hard gold on PCB and hard carbon pills molded into the Silicone Rubber Elastomer
- 2mm Key travel with excellent tactile feedback to operator
- Thermally infused silicone ink into the Elastomer ensures long term readability
- Parylene "C" coated Elastomer and strain relief protects from penetration of bio-hazardous materials at the molecular level.
- A thick 0.06" PCB ensures rigidity under pressure and protection of electronic components
- PCB layout offers EMI/RFI shielding and Ground Connection (ESD)
- Finest grade stainless steel is passivated
- Stainless Steel Threaded Inserts on bottom plate for surface mounting



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## MEDICAL KEYBOARD COMPARISON CHART

	KI6000	KIF6000	KIT6000	KIO7000
Dimensions (Inches)	8.70" x 6.13" x 1.33"	11.27" x 6.13" x 1.13"	11.27" x 6.13" x 1.57"	12.33" x 6.13" x 1.33"
Dimensions (mm)	221mm x 155.7mm x 33.8mm	286.3mm x 155.7mm x 29.5mm	286.3mm x 155.7mm x 39.9mm	313.2mm x 155.7mm x 33.8mm
Weight (Stainless Steel)	40 Oz (1.13 kilograms)	54 Oz (1.53 kilograms)	55 Oz (1.60 kilograms)	59 Oz (1.70 kilograms)
Mouse Pointer		Medical Mouse (Joystick)	Medical Mouse (Trackball)	Medical Mouse (Button Style)
Numeric Keypad				Yes
Key Functionality	101/104	101/104	101/104	101/104
Function Keys	12	12	12	12
Language Options	US QWERTY	US QWERTY	US QWERTY	US QWERTY
Total Keys	69 Keys	69 Keys	69 Keys	90 Keys
Key Travel	2mm travel with excellent tactile feedback			
Sealing	NEMA 4X (IP66)	NEMA 4X (IP66)	NEMA 12 (IP54)	NEMA 4X (IP66)

## KIO76U6 SPECIFICATION

KIO76U6 Measurements	Width: 12.33" (313.2mm)	Height: 6.13" (155.7mm)	Depth: 1.33" (33.8mm)	Weight: 59 Oz (1.70 kg)
Operating Systems	Microsoft Windows® Operating System (Windows XP, Windows 7, Windows 8, Windows 10)			
	Mac OS X® or Linux OS requires compliant USB Device Class Definition for Human Interface Devices 1.11			
Standard Driver	Windows OS USB Composite Driver (does not allow interrupt of OS boot process for BIOS)			

## KIO76U6 ELECTRICAL SPECIFICATION

MTBF	Greater than 100,000 hours
Cabling	Shielded USB Cable (9.5 feet)
Ground Connection	Yes
EMI/RFI Shielding	Designed into PCB Layout
ESD Protection	8Kv (Contact), 15Kv (Air)

## KIO76U6 MECHANICAL SPECIFICATION

Life Expectancy	Elastomer Keys 10,000,000+ activations/cycles (hard carbon pills, hard gold plated PCB)		
Shock	Peak Value 40g (typical)	Peak Duration 11ms	Waveform Half Sine
Vibration	Frequency / Displacement 10-55 Hz @ 0.013 DA		

## KIO76U6 ENVIRONMENTAL SPECIFICATION

Operating Temperature	-40° to 80° C / -40° to 176° F
Storage Temperature	-40° to 80° C / -40° to 176° F
Relative Humidity	100% condensing
Sealing Rating	NEMA 4X (IP66)
Protection	Parylene Coated Elastomer and Strain Relief- toughest molecular barrier protection

## CONFORMANCE / CERTIFICATIONS / COMPLIANCE

subject to manufacturing options applied

U.S.A. Standards	U.S. FCC 47 CFR 15 Class A & B	RF Emissions Compliant 8Kv (Contact), 15Kv (Air)
	MIL-STD-461F	Radiated Emissions and Susceptibility Conformance
	MIL-STD-810G	Protection against humidity, fungus, and salt spray Conformance
	MIL-STD-901D	Protection against shock Conformance
	MIL-STD-167-1	Protection against vibration Conformance
	MIL-STD-1472G	Human Factors Conformance
	MIL-I-45208	Quality System Conformance
	IPC-A-610 II	Acceptability of Electronics Assemblies Certification
European Standards	ISO 9001:2008 (Registration No. 74 300 3983)	
	"CE" Compliant	
	Restriction of Hazardous Substance (RoHS) Directive Compliant	
Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Directive Compliant		
International Standards	IEC 61000-4-2 and EN61000-4-2	ESD 8Kv contact and 15Kv air Conformance
	IEC 61000-4-3 and EN61000-4-3	Radiated Emissions and Susceptibility Conformance
	IEC 61000-6-3 and EN61000-6-3	Electromagnetic Compatibility Conformance