CTI
E L E C T R O N I C S
An Affiliate of **ELECTRO SWITCH**

KI8000 Industrial Keyboard

NEMA 4X (IP66) PLUG-N-PLAY INDUSTRIAL KEYBOARD

• Shown above KI80U1 Industrial Keyboard

performance
durability
reliability

KI8000 STANDARD FEATURES

• NEMA 4 / 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)

• Key contacts are comprised of a thick layer of hard gold on PCB
  and hard carbon pills molded into the Silcone Rubber Elastomer

• 2mm Key travel with excellent tactile feedback to operator

• Thermally infused silicone ink into the Elastomer ensures
  long term readability

• SynProof™ coated Elastomer protects from penetration of
  harsh oils and chemicals (optional Parylene coating)

• A thick 0.06" PCB ensures rigidity under pressure and
  protection of electronic components

• PCB layout offers EMI/RFI shielding and Ground Connection (ESD)

• Metal Enclosure is passivated Stainless Steel

• Stainless Steel Threaded Inserts on bottom plate for surface mounting

• 9.5 foot USB Cable with Strain Relief to prevent cable damage.

KI8000 INDUSTRIAL KEYBOARD

CTI's Plug-n-Play KI8000 Series Industrial Keyboards are comprised of a durable matrix Printed Circuit Board (PCB) with metal stiffener bracket, a rear mounted Interface PCB , a rubber silicone Elastomer, a metal 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 each 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 special molded 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 sealed through CTIs' special formulated flexible polyurethane coating process (Syn-Proof™). Ensuring a watertight seal, these keyboards are encased in the finest grade stainless steel which is passivated.

The NEMA 4 / 4X (IP66) sealed Industrial Keyboards are most suitable for critical applications requiring high durability (10+ years), 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. This a full-size keyboard that is very user friendly to the operator even while wearing gloves.

These Plug-n-Play Industrial Keyboards are offered to the Systems Integrator or Commercial End User with an assurance of high reliability, long term durability, and performance under harsh conditions. Designed for wash down applications these rugged full-size keyboards are an excellent solution for food processing, paper/pulp processing, paint/chemical processing, iron ore/steel manufacturing facilities, etc. The combined features of the Plug-n-Play Industrial Keyboards meet and/or exceed industry standards specifications.

KI8000 MANUFACTURING OPTIONS

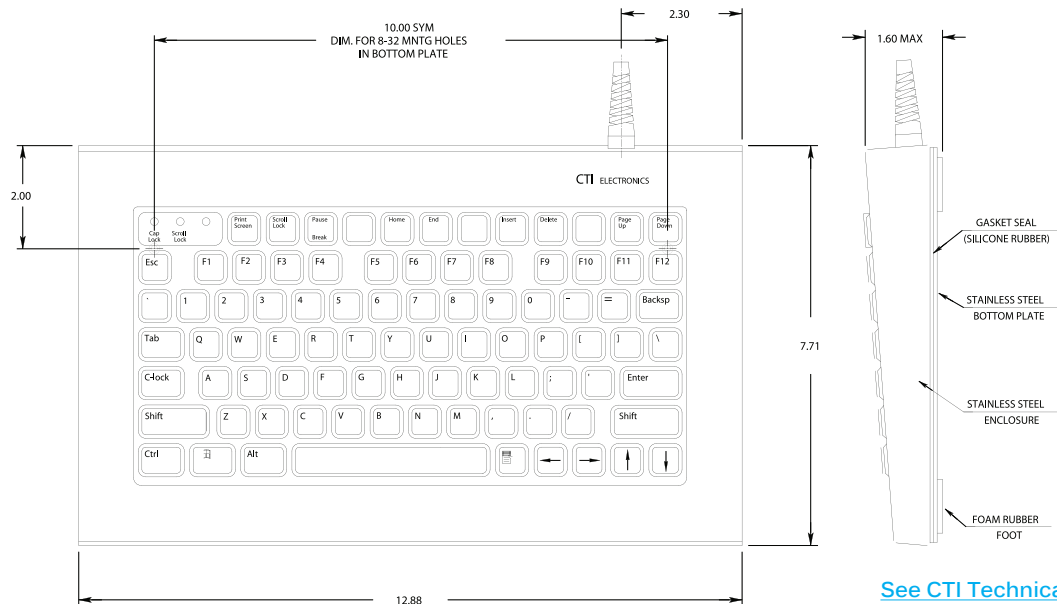| Wx	Shielded USB Bulkhead Cable (1 Foot to 5 Feet)
	*For complete ordering information please refer to Technical Drawings

KI8000 TECHNICAL DRAWINGS

761693	KI8000 Plug-n-Play Industrial Keyboard

KI8000 INDUSTRIAL KEYBOARD TECHNICAL DRAWING

10.00 SYM
DIM. FOR 8-32 MNTG HOLES
IN BOTTOM PLATE

2.30

1.60 MAX

2.00

7.71

12.88

GASKET SEAL
(SILICONE RUBBER)

STAINLESS STEEL
BOTTOM PLATE

STAINLESS STEEL
ENCLOSURE

FOAM RUBBER
FOOT

See CTI Technical Drawing 761693

Product Data Sheet 820193   3-2017

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One Year Warranty   www.ctielectronics.com   Five Year Repair Policy

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NEMA 4X (IP66) PLUG-N-PLAY INDUSTRIAL KEYBOARD

MID-SIZE AND FULL-SIZE INDUSTRIAL KEYBOARD COMPARISON CHART

	KI8000	KI9000	KIF8000	KIF9000	KIT2700
Dimensions (Inches)	12.88" x 7.71" x 1.60"	16.51" x 8.04" x 1.56"	16.38" x 7.71" x 2.78"	20.00" x 8.04" x 1.60"	16.38" x 9.00" x 1.71"
Dimensions (mm)	327.1 x 195.8 x 40.64mm	419.3 x 204.2 x 39.6mm	416.5 x 195.83 x 70.61mm	419.3 x 204.2 x 39.6mm	416.5 x 228.6 x 43.69mm
Stainless Steel | Oz (kg)				117 Oz (3.31 kg)	
Aluminum | Oz (kg)			52 Oz (1.47 kg)		60.6 Oz (1.71 kg)
Mouse Pointer			Industrial Mouse™	Industrial Mouse™	Industrial Trackball
Numeric Keypad		Yes		Yes	
Function Keys	12	24	12	24	12
Language Options	US QWERTY (Standard) See Technical Drawing for Specific Language Options				
Total Keys	87 Keys	116 Keys	87 Keys	116 Keys	87 Keys
Key Travel	2mm travel with excellent tactile feedback				
Backlighting					
Sealing	NEMA 4X (IP66)				NEMA 12 (IP54)

KI8000 SPECIFICATION

KI8000 Measurements	**Width:** 12.88" (327.1mm)	**Height:** 7.71" (195.8mm)	**Depth:** 1.60" (40.64mm)	**Weight:** -
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 Keyboard Driver**			

KI8000 ELECTRICAL SPECIFICATION

MTBF	Greater than 100,000 hours
Cabling	Shielded USB Cable (9.5 feet) (Standard) · Shielded USB Bulkhead Cable Set (W1 - W5) (Optional)
Ground Connection	Yes
EMI/RFI Shielding	Designed into PCB Layout
ESD Protection	8Kv (Contact), 15Kv (Air)
Keyboard Signaling Protocols	**Standard** USB | **Legacy** PS/2, AT, ASCII, SUN. DEC

KI8000 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	

KI8000 ENVIRONMENTAL SPECIFICATION

Operating Temperature	-40º to 80º C / -40º to 176º F
Storage Temperature	-40º to 80º C / -40º to 176º F
Relative Humidity	100% condensing
Sealing Rating	NEMA 4X (IP66)
Protection	SynProof™ Coated (Standard) - protection against harsh oils and chemicals
	Parylene Coated (Optional) - 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

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