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

KI8800 OEM Industrial Keyboard
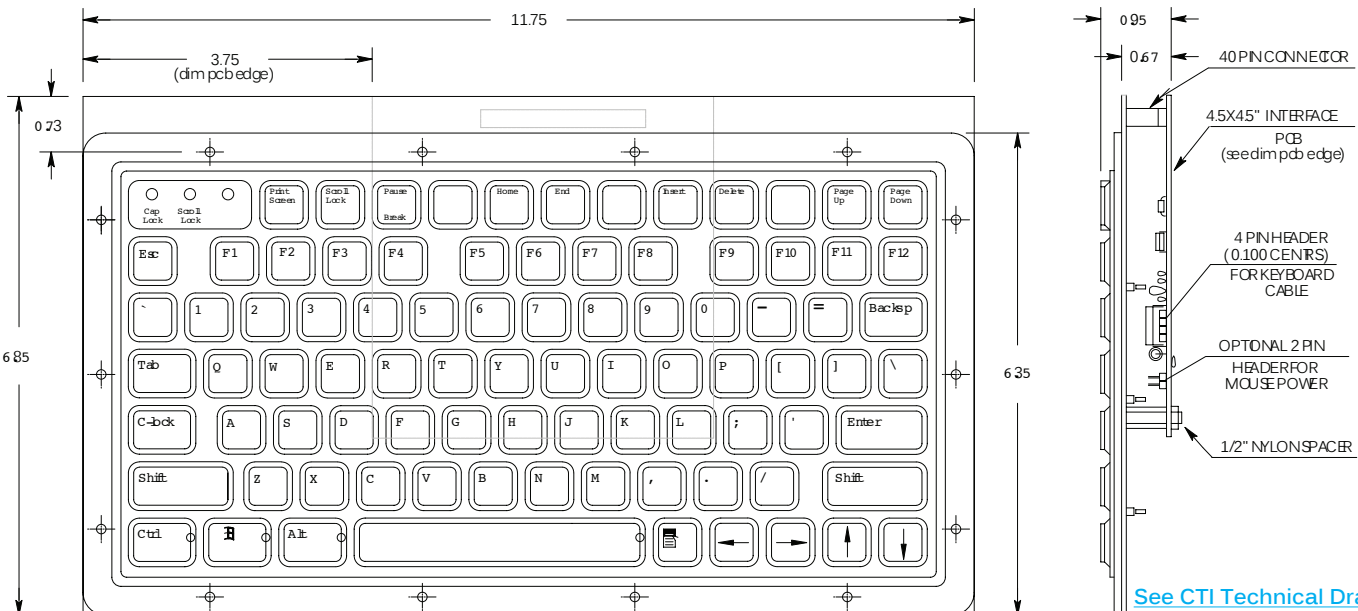
NEMA 4 (IP66) OEM INDUSTRIAL KEYBOARD

• Shown above KI8800 Industrial Keyboard

KI8800 STANDARD FEATURES

• NEMA 4 (IP66) sealing when properly installed

• Standard Operating Temperature -40°C to 80°C (-40°F to 176°F)

• High reliability and durability (MTBF 100,000+ hours,
  10,000,000+ cycles)

• 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

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

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

performance

durability

reliability

KI8800 OEM INDUSTRIAL KEYBOARD

CTI's OEM KI8800 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, and an optional 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™). Lastly, installation is easy since the Elastomer has bosses which hold the PCB assembly together, thus no messy glue or sealers are required.

The NEMA 4 (IP66) sealing 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 mid-size keyboard that is very user friendly to the operator who is wearing gloves.

These OEM Industrial Keyboards are offered to Original Equipment Manufacturers as an open frame module with exposed electrical components that requires mounting and encasement. The properly positioned through holes of the PCB and Elastomer will ensure a NEMA 4 (IP66) watertight sealing over a broad operating temperature range when fastened into a metal enclosure. The combined features of the OEM Industrial Keyboards meet and/or exceed industry standards specifications.

KI8800 OEM KEYBOARD MANUFACTURING OPTIONS

x.x	Optional Shielded USB Cable (1 foot to 9.5 feet)
*For complete ordering information please refer to Technical Drawings	

KI8800 TECHNICAL DRAWINGS

701672	KI8800 OEM Industrial Keyboard

KI8800 OEM INDUSTRIAL KEYBOARD TECHNICAL DRAWING

See CTI Technical Drawing 701672

Product Data Sheet 820179   1-2017

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One Year Warranty   www.ctielectronics.com

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NEMA 4 (IP66) OEM INDUSTRIAL KEYBOARD

INDUSTRIAL KEYBOARD COMPARISON CHART

	KI6800	KIO6800	KIO7800	KI8800	KI9800
Dimensions (Inches)	8.00" x 4.49" x 0.57"	8.00" x 4.46" x 0.51"	11.63" x 4.86" x 0.73"	11.75" x 6.85" x 0.95"	15.45" x 7.12 x 1.05"
Dimensions (mm)	203.2 x 124.1 x 14.4	203.2 x 113.2 x 12.9	295.4 x 4.86 x 0.73	298.4 x 173.9 x 24.1	392.4 x 180.4 x 26.6
Weight | Oz (g)	7 Oz (198 g)	8 Oz (312 g)	12 Oz (340 g)	18 Oz (510 g)	22 Oz (624 g)
Mouse Pointer		OrbitalMouse®	OrbitalMouse®		
Numeric Keypad		Yes (Non-Backlit Model)	Yes		Yes
Key Funtionality	101/104				
Funtion Keys	12	12	12	12	24
Language Options	US QWERTY (Standard) See Technical Drawing for Specific Language Options				
Total Keys	69 Keys	71 Keys	90 Keys	87 Keys	116 Keys
Key Travel	2mm travel with excellent tactile feedback				
Backlighting	Red, Green	Red, Green	Red, Green		
Sealing	NEMA 4 (IP66)				

KI8800 SPECIFICATION

KI8800 Measurements	**Width:** 11.75" (298.4mm)	**Height:** 6.85" (173.9mm)	**Depth:** 0.95" (24.1mm)	**Weight:** 18 Oz (510 g)
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**			

KI8800 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)

KI8800 MECHANICAL SPECIFICATION

Life Expectancy	**Elastomer Keys** 10,000,000+ actuations/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	

KI8800 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 4 (IP66) (when properly installed)
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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