



when reliability is critical™

# How to Select an Industrial Keyboard

Congratulations! You have found the world's best industrial keyboards. Why? Because CTI Electronics Corporation completely designs and manufactures all of the critical sensors, components, circuitry, and firmware necessary to ensure our customers guaranteed long term availability. CTI's Industrial Keyboards have survived 25 years of service; this high durability of success is due to the use of thick layers of hard gold, protective shielding from shocks, vibration, and effects of high EMI and RFI signals. The reliability is unquestionable; 7x24x365 in the harshest of environments these ruggedized industrial keyboards take a beating and keep on performing without fault. That's why we say, "When Reliability is Critical" you need to talk with us. CTI offers Commercial Off The Shelf (COTS) Industrial Keyboards as well as customized (Build to Print) manufacturing. Advanced rapid prototyping and optimization to your demanding requirements is available.

Simply, CTI's NEMA 4 (IP66) sealed industrial keyboard is comprised of a Printed Circuit Board and a rubber elastomer with a Syn-Proof Coating (Resists harsh oils, chemicals, and debris). Yet, it's so complex that it prevents pressurized water seepage (waterproof) and operates in a temperature range between -40°C and +80°C. CTI is so confident of these Industrial Keyboards that it offers, an unheard of, five (5) year Repair Policy on its Rack-Mount and Plug-n-Plays.

To allow CTI to optimize the industrial keyboard solution to the specific requirements of your application we ask that you provide as much detailed information as possible.

**Describe the application of the Industrial Keyboard (usage, how, where, when):**

### Select a stage of manufacture:

**OEM** – An Industrial Keyboard that is mounted underneath a panel or into an enclosure.

#### Approximate Sizes:

Compact/Miniature (8"Wx5"H)	Mid-Size (12"Wx7"H)	Full-Size (15.5"Wx7"H)	Other:
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**Panel Mount** – An Industrial Keyboard mounted into a stainless steel bezel that drops into a panel cut-out.

<b>Approximate Sizes:</b>	(16.5"Wx8"H)	(20"Wx8.5"H)	Other:
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**Plug-n-Play** – An Industrial Keyboard that is in a metal enclosure of aluminum or stainless steel that can be placed on a desk or mounted using the stainless steel inserts onto any surface.

#### Approximate Sizes:

Compact/Miniature (8.75"Wx6"Hx1.25"D)	Mid-Size (12.5"Wx6"Hx1.5"D)	Full-Size (20"Wx8"Hx1.5"D)	Other:
Aluminum Keyboard (NEMA 4 (IP66) sealing)	Stainless Steel Keyboard (NEMA 4X (IP66) sealing)		

**Rack-Mount** – An Industrial Keyboard mounted onto a 19" rack plate with side rails and a face plate.  
1U or 2U model

#### Approximate Sizes:

1U (19"Wx11.5"Hx1.75"D)	2U (19"Wx12.5"Hx3.5"D)	Other:
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*Available in an Aluminum Enclosure.*

**Environment of Usage:** Indoor Outdoor Both Other:

**Operating Temperature Range:** (-40°C to 0°C) (0°C to +40°C) (+40°C to +80°C) Other:

**Subjected to Hazardous Substances:** Yes No  
*(check all that apply)*

<b>Liquids:</b>	Water	Oil	Grease	Bio-Hazard	Chemical	Others:
<b>Solids:</b>	Dirt	Dust	Food	Bio-Hazard	Chemical	Others:
<b>High Emission Signals:</b>	EMI	RFI	Specifics:			

**Will the Operator of the Industrial Keyboard require a Mouse Pointing Device?** Yes No

**Describe the tasks an Operator will perform while using the Industrial Mouse Pointing Device:**

**How many hours of an eight hour day will the Industrial Mouse be used?** hours/day

If **yes**, select an industrial pointing device based upon operator's frequency of usage, cursor speed, fluidity of movement, and size of the targets:

**Industrial Mouse®** - Trademark first used in 1989, application of a Joystick mouse pointing device.  
*(High Usage, Rapid Speed, Smooth Movement of 360° in very fine detail, target size >1mm(0.04"))*

**Arrow Mouse®** - Trademark first used in 1994, application of a Arrow (up, down, left, right) mouse pointing device.  
*(Medium Usage, Rapid Speed, Jumping Movement in up, down, left, right direction, target size >6mm(0.25"))*

**Orbital Mouse®** - Trademark first used in 2003, application of a Button Style, circular, mouse pointing device.  
*(Low Usage, Variable Speed, Jumping Movement of 360° to approximate location, target size >25mm(1.0"))*

**Trackball** – The Ball mouse pointing device provides an IP65 sealing (static) and IP54 sealing (rotating).  
*(Low to High Usage, Slow Speed, Precise Movement in exacting detail, target size ≤ 1mm(0.04"))*  
e.g. A keyboard trackball mouse should be used for fine tracing/outlining objects.

### Select the computer Operating System:

Windows Solaris Unix Linux Real-Time Other:

### Select the Communication Interface:

USB PS/2 RS-232 Serial RS-485 Serial Other:

*CTI has engineered composite devices (keyboard and mouse) that allow communication via a single USB, PS/2, or Serial cable.*

**Is a NEMA 4 (IP66) sealing Bulkhead Panel Cable Set required?:** Yes No

CTI can manufacture the ruggedized Plug-n-Play and Rack-Mount Industrial Keyboards with a cable having a twist on Plug that connects to a Panel. A cut-out is made in the Panel and the second half of the cable (behind panel) set is securely fastened into the panel cut-out. The behind panel cable will then be connected to the computer system via a standard USB or PS/2 plug(s).

<b>Bulkhead Cable Length:</b>	USB	default 5.0 ft (1.52 m)	PS/2	default 6.0 ft (1.82 m)
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**Will the Operator of the Industrial Keyboard and/or Industrial Mouse be using gloves?** Yes No

Heavy/Thick Flexible/Thin Other:

**Is an Industrial Backlit Keyboard (illuminated) required?** Yes No

Red LED's Green LED's Other:

**Is a full numeric keypad required?** Yes No

### Contact Information:

First: \_\_\_\_\_ Last: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address 1: \_\_\_\_\_  
 Address 2: \_\_\_\_\_  
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