KB099-1141X-OEM FlexSilicone™ Keyboard
Full Size User-Programmable USB and PS/2 Industrial Keyboard
with a 360 Smooth Hall Effect Pointing Mouse

Sprintek Corporation

Description

KB099-1141X-OEM is an open frame keyboard for OEM. It is compactly designed with pointing device and numeric keypad, to reliably operate in harsh situations. It perfectly fits in custom panel and console, when properly sealed, it meets MIL-STD-461E and NEMA4/IP67 specifications. KB099-1141X-OEM has 99 ergonomic elastomer keys, provides excellent tactile feel and backlit operation in low light environment.

Applications

- Laptop and portable workstation
- Rugged computing
- Marine consoles
- Gloved operation

Main Features

- Integrated pointing device
- Large key in numeric keypad area
- Excelent tactile feel
- LED backlight with adjustable brightness
- Waterproof, dustproof, resistant to salt fog and most chemicals
- FCC, UL, CE and RoHS compliant

Specifications

- Key material: elastomer keys with wearproof laser engraved legends
- Layouts: all country variants are available
- Key switch technology: silicone switch pad with carbon, gold-plated PCB
- Key Size: 14 x 14mm(F1~F12, number&character key); 14 x 11mm(number key in numeric keypad area)
- Key travel: 1.5mm
- Operating force: 160±30g
- Switch life: >2 million cycles
- Pointing device: Hall sensor
- Voltage: 5V ± 5%
- Current: 50mA ~ 250mA(for backlighting)
- Keyboard backlight colour: red as default, others on request
- Keyboard backlight adjustment: 8 levels by two dedicated key
- External backlight control: PWM signal, available on request
- Interface: USB or PS/2
- Case material: No case
- Mechanical Mouting: embedded by means of M2.5x2.5 threaded holes or RTV adhesive
- Dimensions: 14.409" x5.354" x0.65" (366mm x136mm x16.5mm)
- Weight: 0.475 kg
- OS Compatibility: All Windows and Macintosh operating systems

Environmental Adaptability

- Operating temperature: – 40 to +70°C
- Storage temperature: – 40 to +85°C
- Relative humidity: 100%(properly installed)
- Waterproof: NEMA4/IP67(properly installed)
- EMC: meets MIL-STD-461E(properly installed)
- Electrostatic discharge(ESD) immunity: IEC 801 EN61000-4~2 6kV direct and 8kV air
- Vibration: power spectral density: 0.04g/Hz frequency range: 20Hz-2kHz duration of test per axis: 3 hours
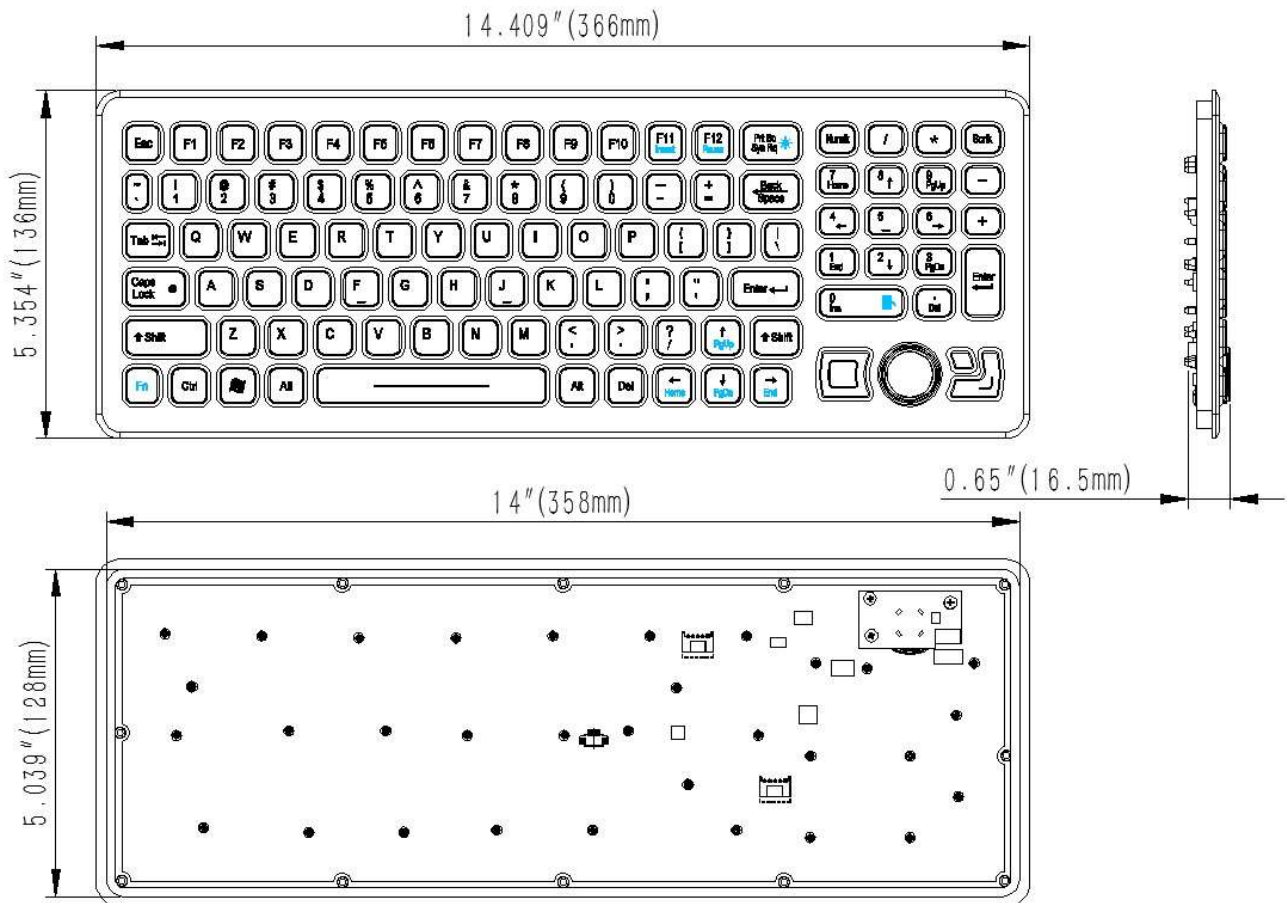- Shock: 3x11ms pulses of 50g on each of 3 axes

Interface Definition

The keyboard in USB and PS/2 interface takes the same connector, the following table shows the description of each pin:

Pin	USB	USB description	PS/2	PS/2 description

1	5V	J1/J3(keyboard & mouse connector, male): **Molex 89401-0510** Matching cable connector(female): **Molex 87369-0500** (Re: 1.25mm pitch connector available)	5V	J1/J3(PS/2 keyboard connector, male): **Molex 89401-0510** J2/J4(PS/2 mouse connector, male): **Molex 89401-0510** Matching cable connector(female): **Molex 87369-0500**
2	D-		Data	
3	D+		Clock	
4	GND		GND	
5	Shield		Shield	
				(Re: 1.25mm pitch connector available)

Dimension

Part Number

Part Number	Product Description
KB099-1141X-01-OEM(LY)	Black elastomer/white legend keyboard with integrated HALL pointing device, red backlight, USB or PS/2 interface, M2.5x2.5 threaded holes, no case
KB099-1141X-CM-OEM(LY)	Black elastomer/white legend keyboard with integrated HALL pointing device, red backlight, USB or PS/2 interface, PWM signal output for external backlight control, M2.5x2.5 threaded holes, no case

KB099-1141X-05-OEM(LY)	Dark grey elastomer/white legend keyboard with integrated HALL pointing device, red backlight, USB or PS/2 interface, M2.5x2.5 threaded holes, no case

*LY=Layout(US as default, DE-German Qwertz, UK- Britain Qwerty, FR- French Azerty, RU-Russian Cyrillic, TR-Turkish Qwerty, DK-Danish Qwerty, IT-Italy Qwerty)
*X=Interface(0-PS/2, 1-USB)
*Other colour backlight on request