



## Description

KB101-1041X-OEM is an open frame keyboard for OEM. It is designed with large numeric pad, 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. KB101-1041X-OEM has 101 ergonomic elastomer keys, provides excellent tactile feel and backlit operation in low light environment.



## Applications

- Rugged computing
- Console and workstation
- Marine consoles
- Gloved operation ● OEM & SI

## Main Features

- Full-size keyboard with large key in numeric pad area
- Excellent tactile feel
- LED backlight with adjustable brightness
- Waterproof, dustproof, resistant to salt fog and most chemicals(properly installed) ● 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&number key in numeric pad area) ●  
Key travel: 1.5mm
- Operating force: 160±30g
- Switch life: >2 million cycles
- 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
- Interface: USB or PS/2. For USB, one PS/2 peripherals extensible
- Case material: No case
- Mechanical mouting: embedded by means of M2.5x2.5 threaded holes or RTV adhesive
- Dimensions: 14.409" x5.354" x0.585" (366mm x136mm x14.9mm)
- 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: 3x1 1ms pulses of 50g on each of 3 axes

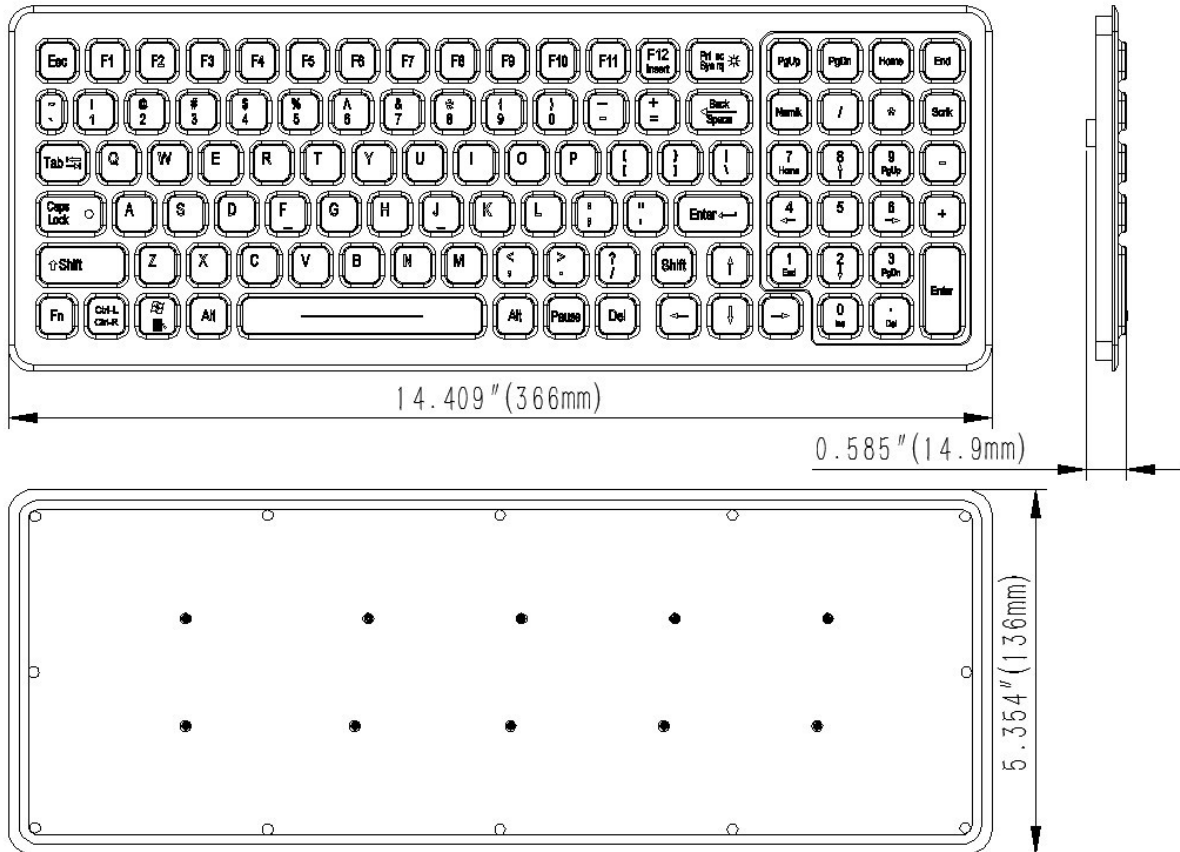
## Interface Definition

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 connector, male):	5V	J1/J3(PS/2 keyboard connector, male):
2	D-	<b>Molex 89401-0510</b>	Data	<b>Molex 89401-0510</b>
3	D+	J2/J4(PS/2 peripheral connector, male):	Clock	Matching cable connector(female):

4	GND	<b>Molex 89401-0510</b>	GND	<b>Molex 87369-0500</b>
5	Shield	Matching cable connector(female): <b>Molex 87369-0500</b> (Re: 1.25mm pitch connector available)	Shield	(Re: 1.25mm pitch connector available)

**Dimension**



**Part Number**

Part Number	Product Description
KB101-1041X-01-OEM(LY)	Black elastomer/white legend, full-size keyboard, red backlight, USB or PS/2 interface, M2.5x2.5 threaded holes, no case
KB101-1041X-05-OEM(LY)	Dark grey elastomer/white legend, full-size keyboard, 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	