

## Specifications:

- Model Name: : 92 Keys Integrated Keyboard with Trackball
- Track ball diameter: : 50 mm
- Keyboard / PCB Size: : Keyboard: 430.0 x 150.0mm / PCB: 410.0 x 130.0mm
- Keyboard Interface: : USB type A; Cable length: 3 Meter
- Keyboard type: : Metallic Keyboard
- Keys type: : Gold Plated Metal Domes Tactile keys
- Operation temperature : 0°C to +55°C
- Storage temperature : 0°C to +70°C
- Ingress Protection : IP65 Compliant

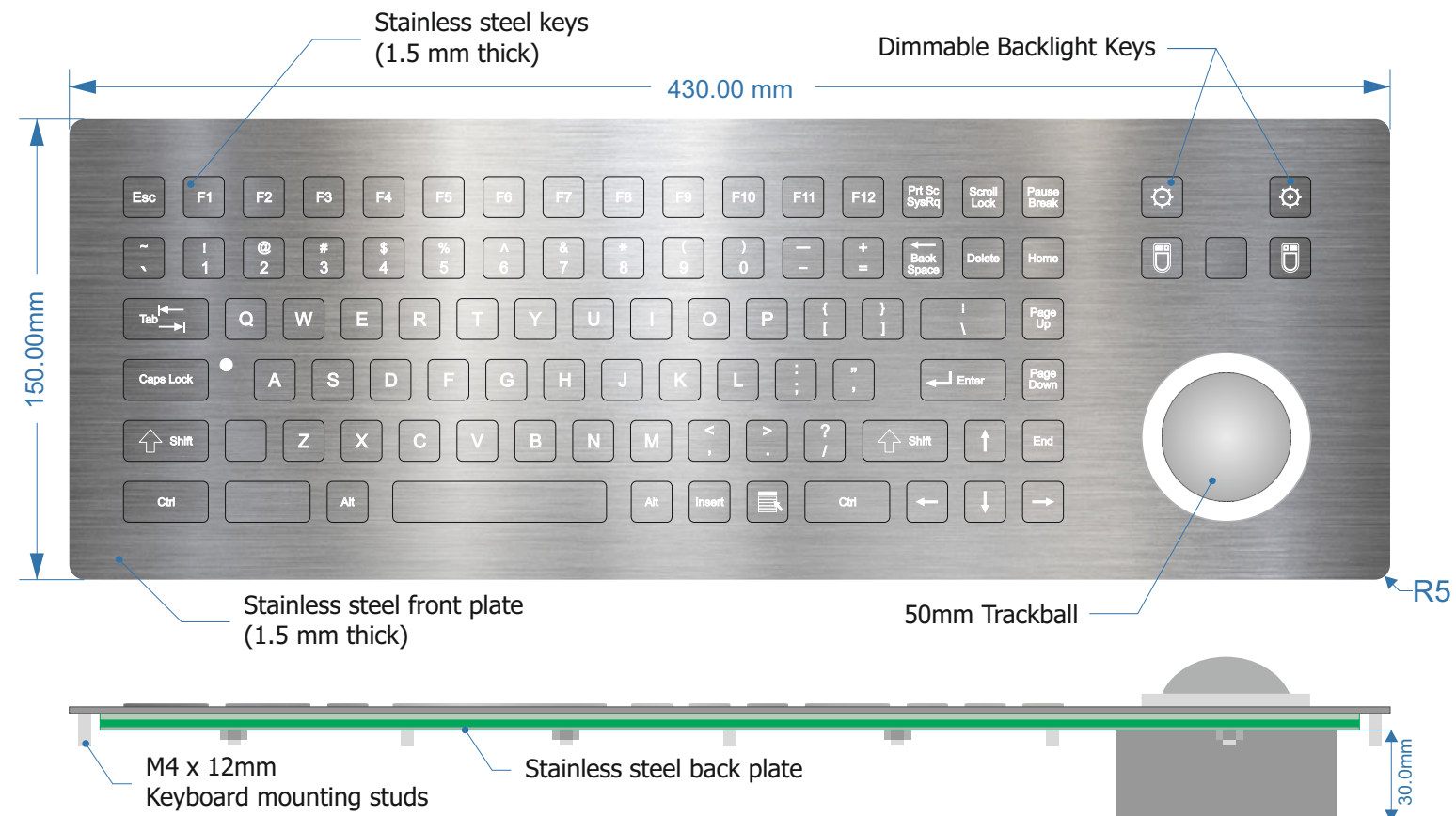
## Features:

- 50 mm Ip65 grade trackball intergrated
- AL316 Stainless steel raised keys which are etched & filled with semi transparent epoxy for Backlight.
- Complete sealing with silicone rubber
- Super quality AL316 grade top plate with M4 X 12 Studs for top panel mounting which is good for marine application with humidity, water, oil, dust, salt etc.
- Front panel mounting with M4 x 12 Stud
- Dimmable Backlight; can be controlled by separate 2 keys
- Backlight : In White/Blue/Green/Yellow or any specific.
- Compliant to MIL STD 461 E/F

## Applications

- Marine & Naval application
- Public interactive kiosks
- Interactive ATM's
- Fuel dispenser pump
- Harsh environment

## Mechanical Drawing



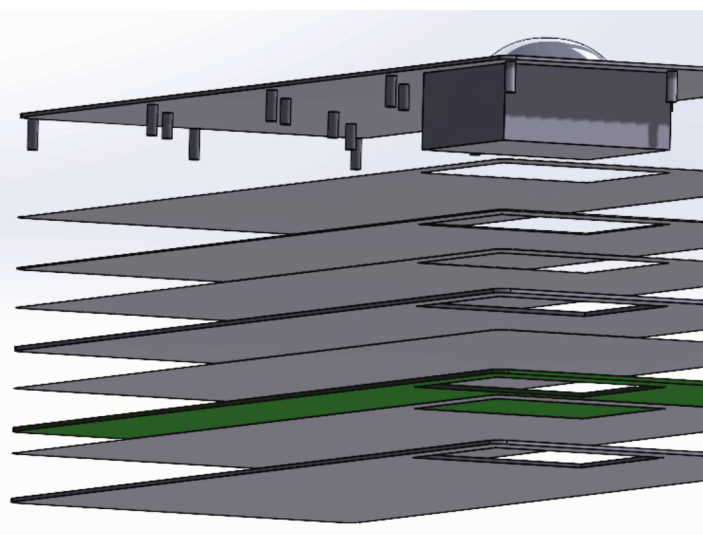
## Important Note:

Keetronics has designed a keypad to withstand the compliance tests detailed in the 'Type Testing For Operator Console' and 'Environmental Condition for Operator Console' documents. We have taken precautions during the keypad design process, including the selection of raw materials, to ensure our products meet these standards.

To validate these precautions through certification, we would like to request that you conduct the specific tests detailed in the documents mentioned below.

## Type testing for operator console:

S.no	Description of Test	Specification	Method/Standard
1	Vibration	Frequency range 5-33Hz	JSS 55555, Class N1, Major Warship, Test Number 28
2	Shock	NSS-II	EG/5522/Policy dated 11 May 07
3	Bump test	Repeated bumps	JSS 55555, Class N1, Test Number 5
4	Low temperature	Temperature	JSS 55555, Class N1, Major Warship, Test Number 20
5	High temperature	Operation: +55° C Storage: +70° C	JSS 55555, Class N1, Test Number 17
6	Tropical Exposure	Humidity and Temperature	JSS 55555, Class N1, Test Number 27
7	Humidity (damp)	Humidity	JSS 55555, Class N1, Test Number 10
8	Ship motion	ROLL: ±20° PITCH: ±6° TRIM: Max 5° LIST: 20°	NES 1004
9	Mould growth	Mould growth	JSS 55555, Class N1, Test Number 21
10	Drip proof	Water ingress	JSS 55555, Class N1, Test Number 11 & IEC 60529
11	IP	Ingress protection	IEC 60529
12	EMI/EMC	30 Hz - 18GHz	MIL STD 461E/F
13	Inclination	30°, 2 Direction	NES 1004



## ENVIRONMENTAL CONDITIONS FOR OPERATOR CONSOLE

Description	Value
Max Relative Humidity	Max 95% at 35 °C
Max Ambient Sea Water Temp.	35° C
Salinity of Sea Water	35000 PPM
Sea-worthiness	Operation Role – Upto Sea State 5 Survivability – Upto Sea State 8
Shock and Acceleration	NSS Grade II EG/5522/Policy dated 11 May 07 for Shock test.
Vibration	JSS55555 (5-33 Hz)
EMI/EMC	Compliant to MIL STD 461 E/F
Roll	Max 20° with 10 sec period
Trim	Max 5°
List	Max 20° with vertical
Pitch	Max 6° with 20 sec period
ESD Protection	The system design will consider adequate measures for Electro Static Discharge (ESD) Control and protection at PCB/MODULE/ASSEMBLY and Unit level Each Electro Static Discharge sensitive part / Assembly will be duly marked with a symbol/warning.

**Note:**

Keetronics will conduct the following tests on the keypad and provide certification:

Operating Temperature: 0 to 55 °C

Storage Temperature: 0 to 70 °C

Ingress Protection: IP65