

IEC 60945 HMI Keyboard family- upgraded version

HMI keyboards for the maritime and offshore business.

This upgraded version has options with input from other systems, with alarm indications and acknowledge buttons.

The HMI- Keyboard series has been developed to meet the specific need and demand of the maritime market. It is designed for the best tactical feeling, using silicone buttons with smooth surface, which gives a soft and light feeling when operating.

The HMI- keyboards can also be ordered with custom layouts, which gives even further flexibility. Each key on the keyboards can be individually etched with your label or letter. We can generate user's required key codes and languages. Sequenced key codes can also be generated on a single key.

The panels can also be delivered with custom color, logo, and design requirements.

Our IEC 60945 series

- QWERTY and Trackball panel
- Functional and Trackball panel
- Knob panel
- Joystick panel



QWERTY and Trackball panel


The keyboard has been developed to meet the specific need and demand of the maritime market. It is designed for the best tactical feeling, using silicone buttons with a smooth surface, which gives a soft and light feeling when operating.

This upgraded version has options with input from other systems, with alarm indications and acknowledge buttons

The keyboard is delivered in US-keyboard layout and has dim-able red LED-backlight.

The keyboard can also be ordered with custom layouts, which gives even further flexibility with very little additional development, time, and cost, each key on the keyboards can be individually labeled and can generate user's required key codes and languages. Sequenced key codes can also be generated on a single key.

Used in applications as ECDIS, DP, Route planner and other applications

Number - name	17610642- QWERTY and Trackball panel
Size (w*h)	Qwerty & Trackball: 388 x 188mm Cutout- see last page in this document
Mounting	Drop-in module with mounting studs in frame. OR countersunk M4 screws
Key switch Technology	92 (+3) silicone buttons.
Trackball	50mm Mechanical. Removable ball for cleaning
ProtectionLevel	IP22
Interface	2x USB type B
OS supported	Win, Mac & Linux
Backlight	Yes. Red, dimmable
Power consumption	Max 700mA
Operation Temperature	-15°C~ 55°C
Storage Temperature	-20°C~ 60°C
Approvals	Tested and approved according to IEC60945. DNV-CG-0339 



Installation

Mechanical

Anodized aluminum frame. With aluminum enclosure box. Designed as a drop-in-panel, which requires a cutout in the console

Connections

The keyboard and trackball are installed by using a standard USB cable type A-B – where the type B connector is connected to the panel and the type A connector is connected to PC/unit.

No external power supply necessary.

Device driver

The keyboard and trackball are USB HID interface compatible and there is no need for a special device driver. Functional buttons on top of the panel have USB CDC (UART)

LED and Backlight adjustments

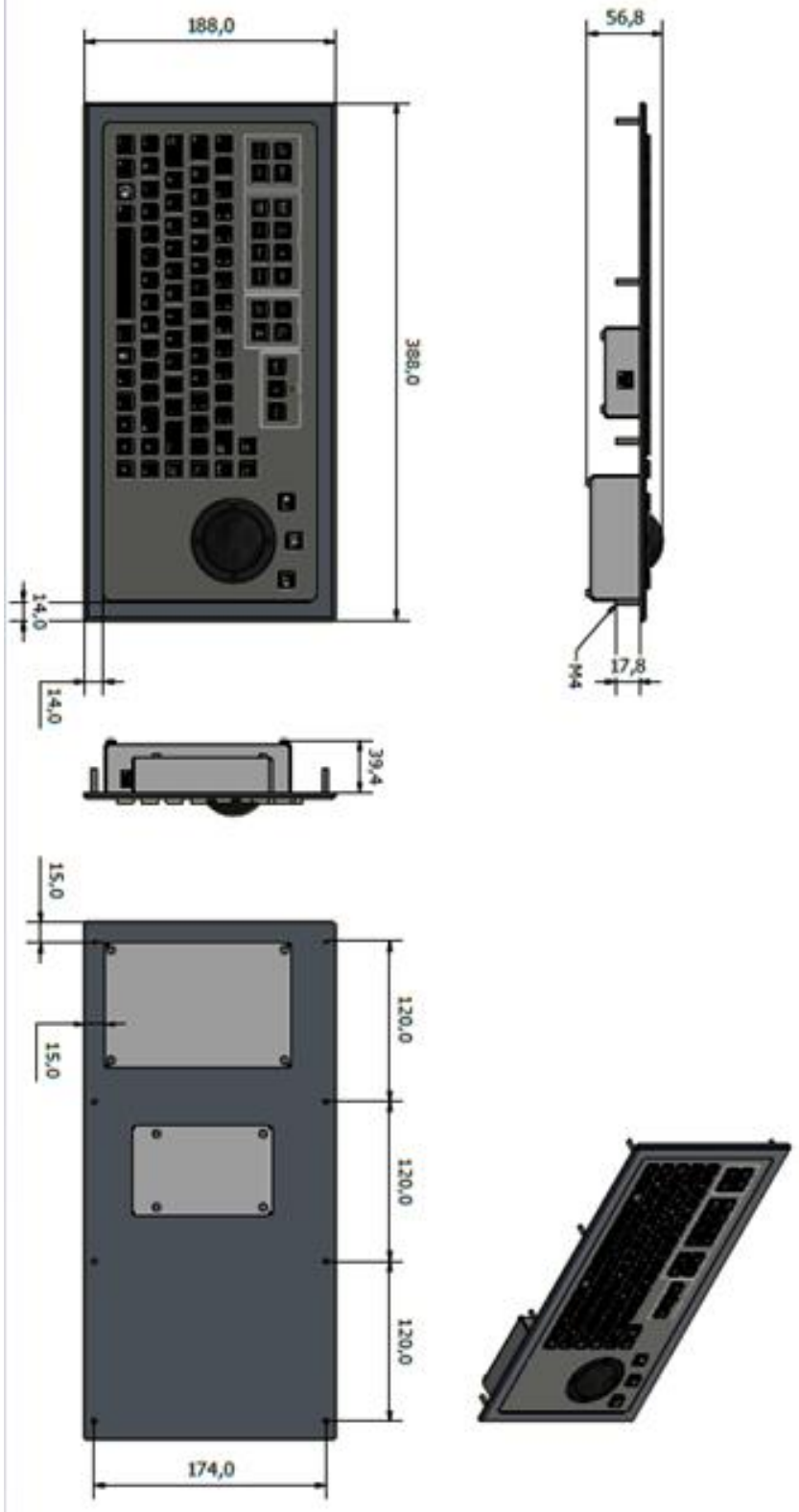
The panel have integrated red LED backlight that illuminates all keys. Dimming is done by buttons on the panel. It is also possible with common dimming for all panels.

Standby mode

By turning on the standby mode, you can clean the panels without interference in your system

Input of alarm/signals from other applications

RGB LED that indicates alarms or other status from your system. Buttons to acknowledge or mute alarms



Functional and Trackball panel

The Keyboard is based on our QWERTY and Trackball panel. Using the same IEC60945 test, only removing some functions.

It is designed for the best tactical feeling, using silicone buttons with smooth surface, which gives a soft and light feeling when operating.


This upgraded version has options with input from other systems, with alarm indications and acknowledge buttons

The keyboard is delivered in US-keyboard layout and has dimmable red LED-backlight.

The keyboard can also be ordered with custom layouts, which gives even further flexibility with very little additional development, time, and cost, each key on the keyboards can be individually labeled and can generate user's required key codes and languages. Sequenced key codes can also be generated on a single key

Used in applications as ECDIS, DP, Route planner and other applications



Number - Name	17610643- Functional and Trackball panel
Size (w*h)	Functional and Trackball: 258 x 188mm Cutout- see last page in this document Weight: 1,02 kg
Mounting	Drop-in module with mounting studs in frame. OR countersunk M4 screws
Key switch Technology	32 (+3) silicone buttons.
Trackball	50mm Mechanical. Removable ball for cleaning
ProtectionLevel	IP22
Interface	2x USB type B
OS supported	Win, Mac & Linux
Backlight	Yes. Red, dimmable
Power consumption	Max 350mA
Operation Temperature	-15°C~ 55°C
Storage Temperature	-20°C~ 60°C
Approvals	Tested and approved according to IEC60945. DNV-CG-0339 

Installation

Mechanical

Anodized aluminum frame. With aluminum enclosure box. Designed as a drop-in-panel, which requires a cutout in the console

Connections

The keyboard and trackball are installed by using a standard USB cable type A-B – where the type B connector is connected to the panel and the type A connector is connected to PC/unit.

Device driver

The keyboard and trackball are USB HID interface compatible and there is no need for a special device driver. Functional buttons on top of the panel has USB CDC (UART) No external power supply necessary.

LED and Backlight adjustments

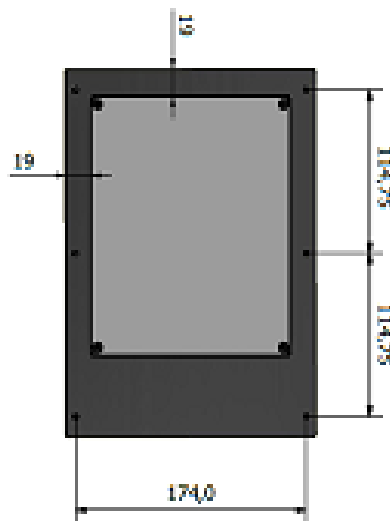
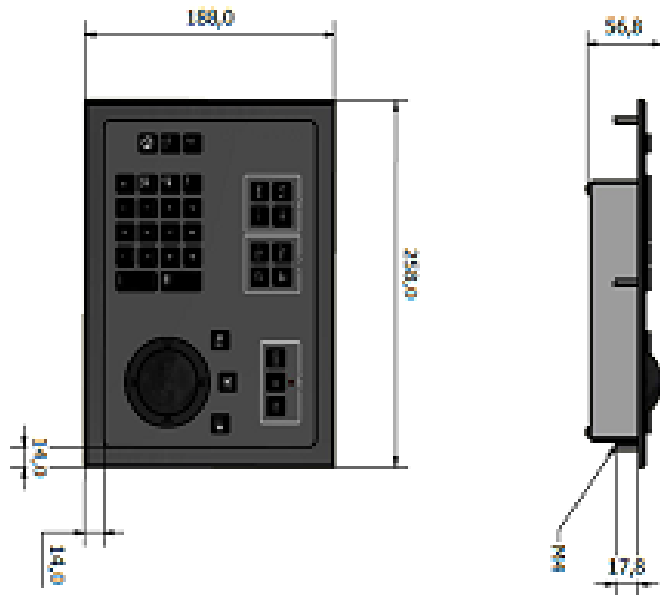
The panel have integrated red LED backlight that illuminates all keys. Dimming is done by buttons on the panel. It is also possible with common dimming for all panels

Standby mode

By turning on the standby mode, you can clean the panels without interference in your system

Input of alarms from other applications

RGB LED that indicates alarms or other status from your system. Buttons to acknowledge or mute alarms



Knob panel

The keyboard has been developed to meet the specific need and demand of the maritime market.

It is designed for the best tactical feeling, using silicone buttons with smooth surface, which gives a soft and light feeling when operating.


This upgraded version has options with input from other systems, with alarm indications and acknowledge buttons

The keyboard is delivered in US-keyboard layout and has dim-able red LED-backlight.

The keyboard can also be ordered with custom layouts, which gives even further flexibility with very little additional development, time, and cost, each key on the keyboards can be individually labeled and can generate user's required key codes and languages. Sequenced key codes can also be generated on a single key.

Used in applications as ECDIS, DP, Route planner and other applications



Number- name	17610644- Knob panel
Size (w*h)	Knob panel: 120 x 188mm Cutout- see last page in this document Weight: 0,8 kg
Mounting	Drop-in module with mounting studs in frame. OR countersunk M4 screws
Key switch Technology	10 single button + silicone buttons.
Knob	Continuous rotating knob, with 32 bumps pr round on 360 deg
ProtectionLevel	IP22
Interface	USB – CDC (UART)
OS supported	Win, Mac & Linux
Backlight/LED	Red, dimmable RGB LED indicators
Power consumption	Max 250mA
Operation Temperature	-15°C~ 55°C
Storage Temperature	-20°C~ 60°C
Approvals	Tested and approved according to IEC60945. DNV-CG-0339 

Installation

Mechanical

Anodized aluminum frame. With aluminum enclosure box. Designed as a drop-in-panel, which requires a cutout in the console

Connections

The keyboard and trackball are installed by using a standard USB cable type A-B

– where the type B connector is connected to the panel and the type A connector is connected to PC/unit.

Knob

Aluminium knob. Continuous rotating, with 32 bumps pr round on 360 deg.

Device driver

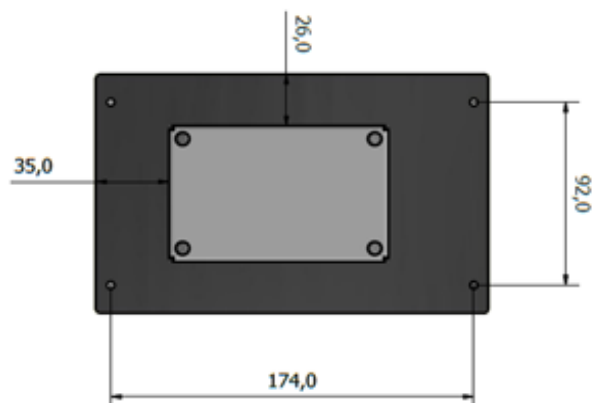
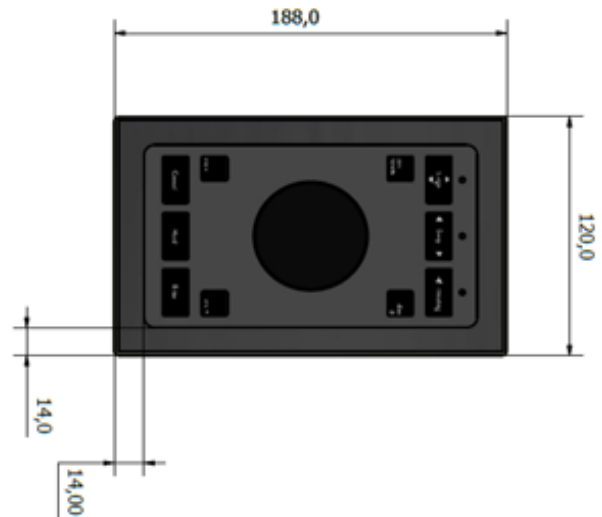
The panel are USB CDC(UART) interface compatible and there is no need for a special device driver.

LED and Backlight adjustments

The panel have integrated red LED backlight that illuminates all keys. Dimming is done by buttons on the panel. It is also possible with common dimming for all panels. 3 Indicator LED`s

Standby mode

By turning on the standby mode, you can clean the panels without interference in your system



Joystick panel


The Joystick has been developed to meet the specific need and demand of the maritime market.

The joystick can be a standalone unit or can be utilized with other units.

It is a 3-axis joystick and offers functions like push-and stay with a button on top. Alternative joysticks from the same series with other options can be used.

The Keytouch Joystick panel can be adapted to meet individual OEM customer color, logo, and design requirements.



Number- name	17610645- Joystick panel
Size (w*h)	Panel: 119 x 188mm Cutout- see last page in this document Weight: 1,24 kg
Mounting	Drop-in module with mounting studs in frame. OR countersunk M4 screws
ProtectionLevel	IP22
Interface	USB type B
Power consumption	ca 250mA
OS supported	Win, Mac & Linux
Backlight	No
Operation Temperature	-15°C~ 55°C
Storage Temperature	-20°C~ 60°C
Joystick	CALDARO ZC06B-9241A 3-AXIS, 1 switch
Approvals	Tested and approved according to IEC60945. DNV-CG-0339 
Optional	- Up to 5 more analog inputs - Up to 12 switches or indicators - Other type of joystick available

Installation

Mechanical

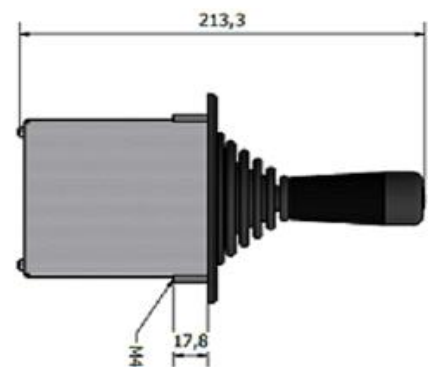
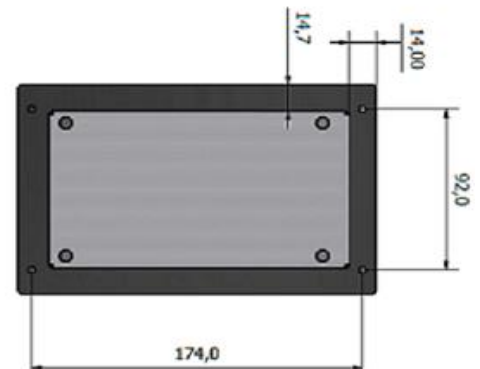
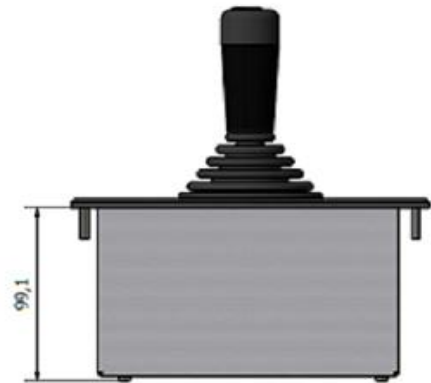
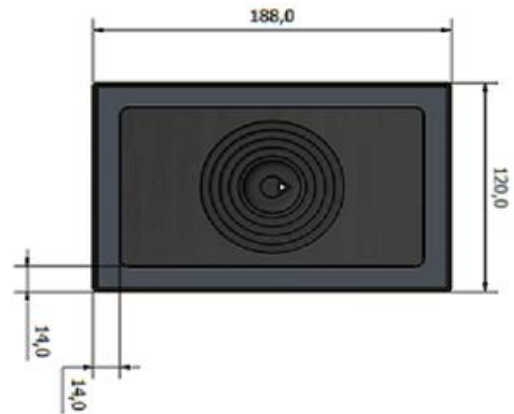
Anodized aluminum frame with silicon on top. Aluminum enclosure box. Designed as a drop-in-panel, which requires a cutout in the console

Connections

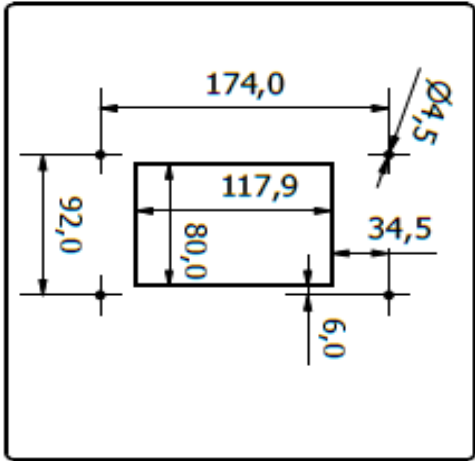
USB Type A.

Device driver

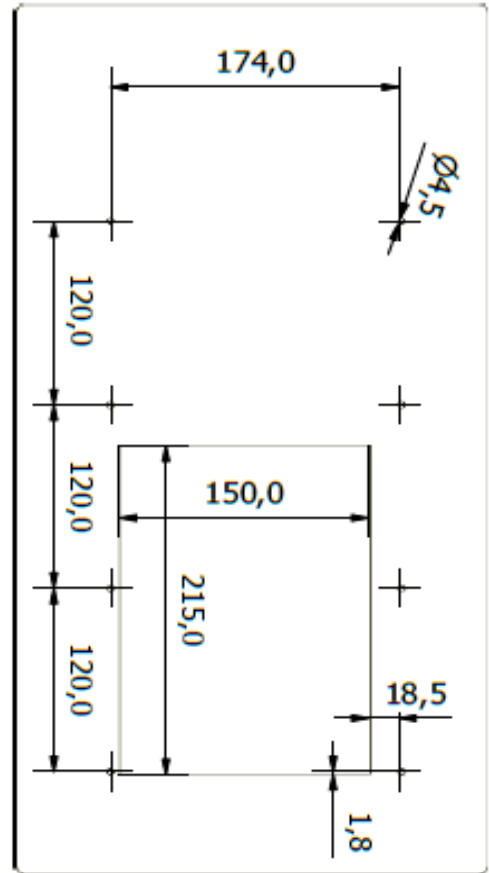
USB HID interface compatible and there is no need for a special device driver.



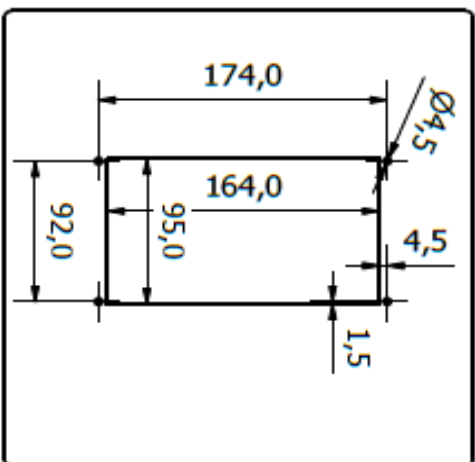
Cutout drawings all panels



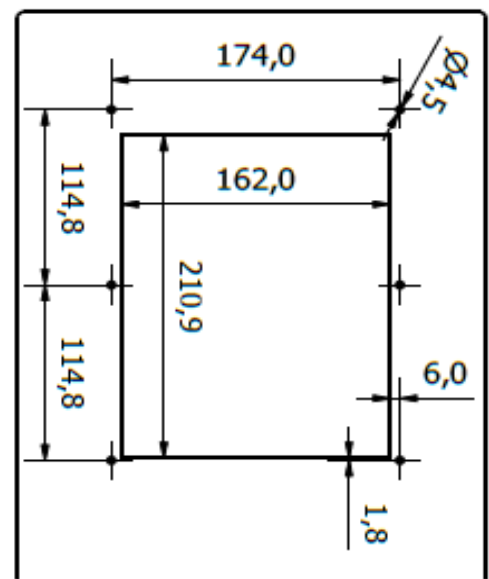
17610643 Knob panel



17610641 QWERTY and Trackball Panel



17610644 Joystick



17610642 Functional and Trackball panel