TechNexion
INNOVATORS OF TECHNOLOGY

TWP-1010-BSW / TWP-1560-BSW
Quickstart Guide

1 Safety Precautions

Thank you for purchasing a TechNexion TWP series device. This installation guide will be helpful in the installation, wiring and inspection of your TechNexion stainless steel IP69K HMI. Before using the product, please read this guide to ensure correct use. You should thoroughly understand all safety precautions before proceeding with the installation, wiring, and operation. Place this instruction sheet in a safe location for future reference.

1.1 Storage and Installation

- Keep the device dry. Precipitation, humidity, and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your device does get wet, allow it to dry completely.
- Do not use or store the device in dusty or dirty areas. Its parts and electronic components can be damaged.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device.This product needs to be installed by qualified personnel.
- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards and fine mechanics.
- Do not paint the device. Paint can clog the parts and prevent proper operation.
- Unauthorized modifications or attachments could damage the device and may violate regulations governing radio devices.

1.2 Wiring

- Make sure that the available power source matches the required input power of the device. Failure to observe this caution may result in electric shock or fire.
- Do not power the unit by DC input when you apply power over the PoE (8-pin M12).

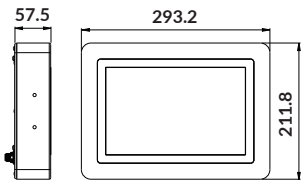
1.3 Maintenance and Inspection

- Do not touch any internal or exposed parts of the device as electrical shock may result.
- Do not open the device while power is on. Otherwise electrical shock may result.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Be sure the ventilation holes are not obstructed during operation. Otherwise malfunction may result due to bad ventilation or overheating.

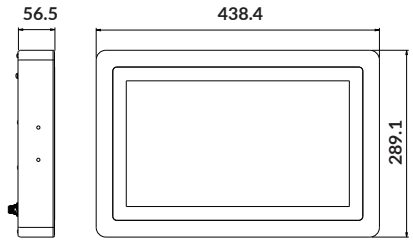
These suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

2 Dimensions

TWP-1010-BSW



TWP-1560-BSW



Unit : mm

3 Installation Instructions

This section describes the mounting procedures for the TWP series device. The material in the mounting area must provide sufficient strength for support of this HMI.

3.1 VESA Mounting

This device is compatible with VESA MIS-D Standard 75*75mm. There are 4 VESA MIS-D (M4) mounting holes on the rear side of the device. M4 screws with at least 6mm head-to-tip length are required to secure this device.

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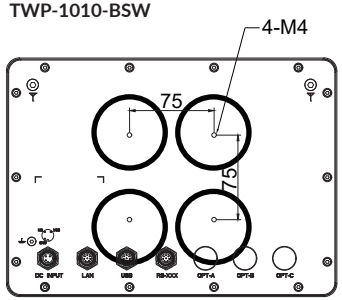
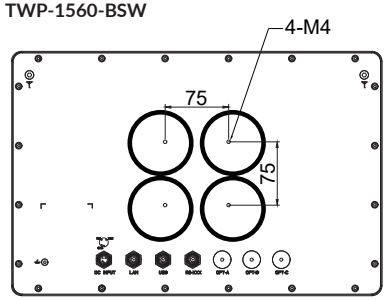


TWP-1560-BSW



3.2 Yoke Mounting

This device is compatible with 50mm Yoke Standard. There are two Yoke (M6) mounting holes each on the left and on the right side of the device. M6 screws with at least 7.5mm head-to-tip length are required to secure this device.

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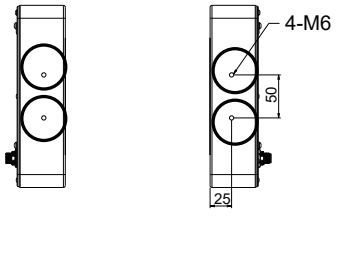
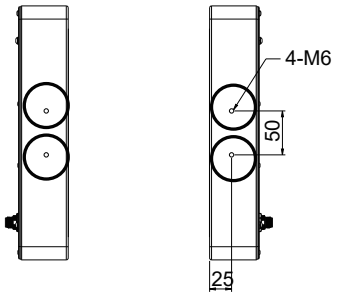
Left side view: Right side view:



TWP-1560-BSW

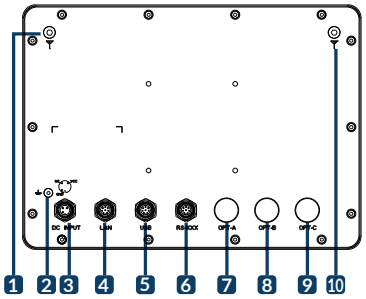
Left side view: Right side view:



4 External Connectors

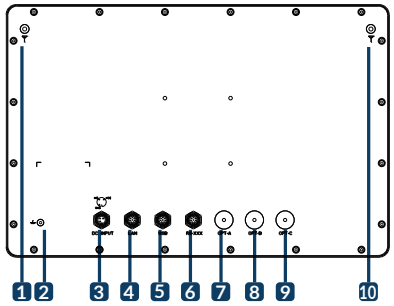
TWP-1010-BSW

Rear view:



TWP-1560-BSW

Rear view:



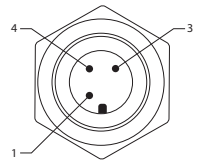
No.	Description	No.	Description
1	Antenna hole	6	RS-XXX Serial Port (8-pin M12) connector
2	Grounding M4 screw	7	OPT-A connector hole
3	DC Input(3-pin M12) connector	8	OPT-B connector hole
4	LAN (8-pin M12) connector	9	OPT-C connector hole
5	USB 2 port (8-pin M12) connector	10	Antenna hole

5 Pin Definition

5.1 Power Input Connector (DC INPUT)

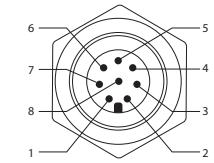
The TWP-1010-BSW/TWP-1560-BSW can be powered either over the DC INPUT connector or PoE (optional) over the M12 LAN port.

NOTE: Do not power the unit by DC input when you apply power over the Power over Ethernet (M12)!

Port	Pin #	Signal	Device
	1	GND	Ground
	3	VCC	DC Voltage input (12V/24V/8~36VDC)
	4	NC	

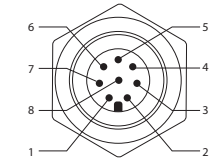
Header: Amphenol LTW 12-03PMMP-SF8003 (3-pin M12) front fastened male connector.
Cable receptacle: Amphenol LTW 12-03BFFA-SL8001 (3-pin M12) screw thread female connector.

5.2 Gigabit Ethernet Interface (LAN)

Port	Pin #	1000 Mbps	100 Mbps	10 Mbps
	1	MDI0+	Transmit Data+	Transmit Data+
	2	MDI0-	Transmit Data-	Transmit Data-
	3	MDI1+	Receive Data+	Receive Data+
	4	MDI2+		
	5	MDI2-		
	6	MDI1-	Receive Data-	Receive Data-
	7	MDI3+		
	8	MDI3-		

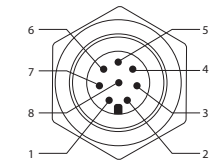
Header: Amphenol LTW 12-08PMMP-SF8003 (8-pin M12) front fastened male connector.
Cable receptacle: Amphenol LTW 12-08BFFA-SL8001 (8-pin M12) screw thread female connector.

5.3 USB Connector (USB)

Port	Pin #	GPIO1/2 Signal	Description
	1	VBUS	5V Universal Serial Bus Power port 1
	2	VBUS	5V Universal Serial Bus Power port 2
	3	USB_D-	Universal Serial Bus differential pair signal port 1
	4	USB_D+	
	5	USB_D-	Universal Serial Bus differential pair signal port 2
	6	USB_D+	
	7	GND	Ground port 1
	8	GND	Ground port 2

Header: Amphenol LTW 12-08PMMP-SF8003 (8-pin M12) front fastened male connector.
Cable receptacle: Amphenol LTW 12-08BFFA-SL8001 (8-pin M12) screw thread female connector.

5.4 Serial Port Connector (RS-XXX)

Port	Pin #	GPIO1/2 Signal	Device
	1	NC	
	2	SERIAL1A_RXD	ttymxc0
	3	SERIAL1A_TXD	ttymxc0
	4	NC	
	5	GND	
	6	NC	
	7	SERIAL1A_RTS	ttymxc0
	8	SERIAL1A_CTS	ttymxc0

Header: Amphenol LTW 12-08PMMP-SF8003 (8-pin M12) front fastened male connector.
Cable receptacle: Amphenol LTW 12-08BFFA-SL8001 (8-pin M12) screw thread female connector.

6 Software Installation

The unit is by default preloaded with software that can download and install a selection of Linux OS images over hardwired network. Simply connect a network to the unit through the Ethernet LAN M12 connector and power it up, then follow the steps on the screen to load the software. Local proxies will interfere with this process. For more information, go to our Knowledge Base at: https://www.technexion.com/support/knowledge-base/

To download drivers for the Windows operating systems, go to our Download Center at:
https://www.technexion.com/support/download-center/
For more information about installing and configuring the Windows operating systems, see:
https://msdn.microsoft.com/en-us/

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