TechNexion
INNOVATORS OF TECHNOLOGY

TC-0700 / TC-0710
Quickstart Guide

1 Safety Precautions

Thank you for purchasing a TechNexion TOUCAN series device. This installation guide will be helpful in the installation, wiring and inspection of your TechNexion 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 (RJ45).
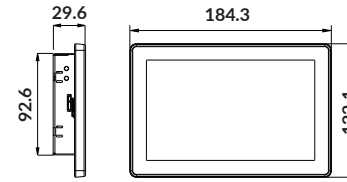
1.3 Maintenance and Inspection

- 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.
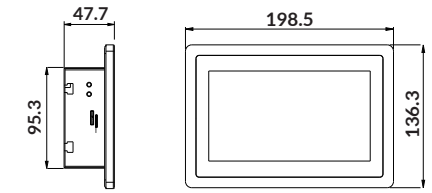
2 Dimensions

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29.6   184.3   92.6   122.1

TC-0710

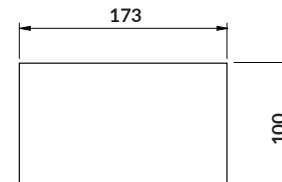47.7   198.5   95.3   136.3

Unit : mm

3 Installation Instructions

This section describes the mounting procedures for the TOUCAN series device. The material in the mounting area must provide sufficient strength for support of this HMI.
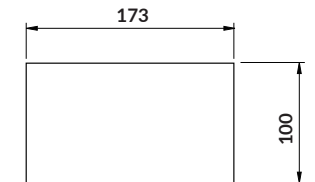
3.1 Cut-out Dimensions

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173   100

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173   100

Unit : mm

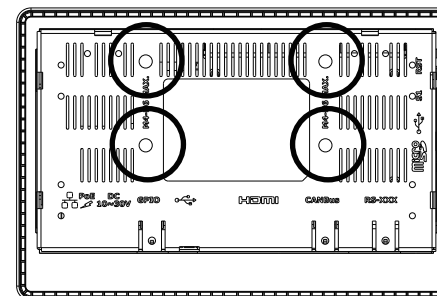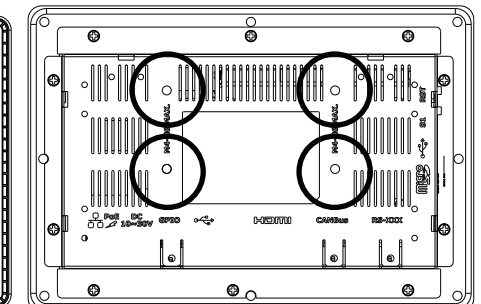### 3.2 VESA Mounting

This device is compatible with VESA MIS-C Standard 35*75mm. There are 4 VESA MIS-C (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.
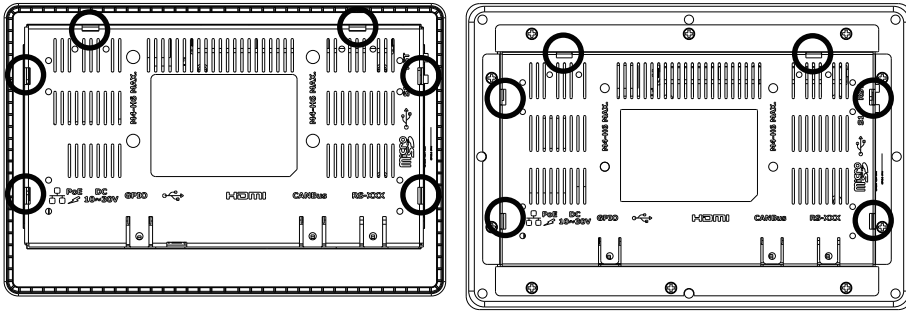
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3.3 Rear Mounting and Mounting Clips Installation

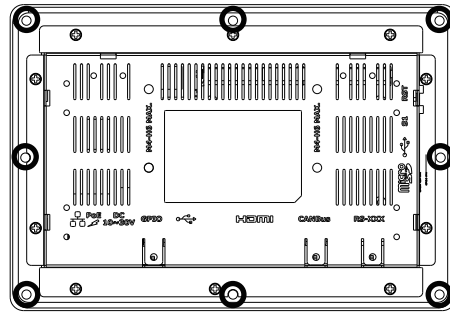There are 6 mounting clips required for rear mounting.

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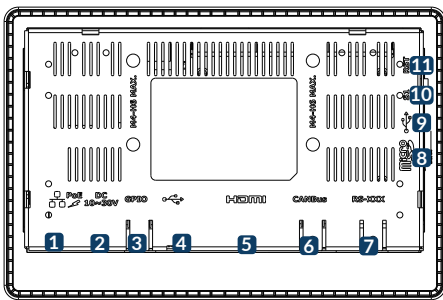## 3.4 Surface Mounting Installation (TC-0710 only)

There are 8 mounting holes (M4) on the rear side of the device required for surface mounting. M4 screws with at least 6mm head-to-tip length are required to secure this device.
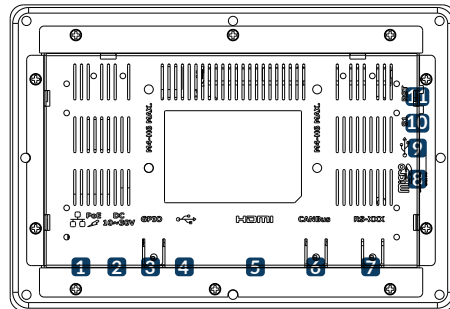
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4 External Connectors

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No.	Description	No.	Description
1	LAN RJ45 and PoE connector	7	RS-XXX (Serial Port) connector
2	Power Input (10~30VDC) connector	8	MicroSD cardslot
3	GPIO connector	9	USB OTG connector
4	USB Host connector	10	S1 Boot Select button
5	HDMI connector	11	Reset button
6	CAN Bus connector		

5 Pin Definition

5.1 Serial Port Connector (RS-XXX)

Pin #	RS-232 + RS-232	RS-232 + RS-422	RS-232 + RS-485	Device
1	GND	GND	GND	
2	SERIAL1A_TXD	SERIAL1A_TXD	SERIAL1A_TXD	ttymxc0
3	SERIAL1A_RXD	SERIAL1A_RXD	SERIAL1A_RXD	ttymxc0
4	SERIAL1A_RTS	SERIAL1A_RTS	SERIAL1A_RTS	ttymxc0
5	SERIAL1A_CTS	SERIAL1A_CTS	SERIAL1A_CTS	ttymxc0
6	GND	GND	GND	
7	SERIAL1B_TXD	SERIAL1B_TXD+	SERIAL1B+	ttymxc1
8	SERIAL1B_RXD	SERIAL1B_RXD	NC	ttymxc1
9	SERIAL1B_RTS	SERIAL1B_RXD+	NC	ttymxc1
10	SERIAL1B_CTS	SERIAL1B_TXD-	SERIAL1B-	ttymxc1

Header: Molex 43045-1000 (10-pin Micro-Fit 3.0).
Cable receptacle: Molex 43025-1000 (10-pin Micro-Fit 3.0) plug with crimp contact Molex 43030-0007.
Shielding with 6.3mm male spade terminal connector.

5.2 CAN Bus Connector (CANBus)

Pin #	Signal	Interface
1	GND_CAN	
2	CAN1A_TERM_P	can0
3	CAN1A_P	can0
4	CAN1A_N	can0
5	CAN1A_TERM_N	can0
6	NC	
7	GND_CAN	
8	CAN1B_TERM_P	can1
9	CAN1B_P	can1
10	CAN1B_N	can1
11	CAN1B_TERM_N	can1
12	NC	

Header: Molex 43045-1200 (12-pin Micro-Fit 3.0).
Cable receptacle: Molex 43025-1200 (12-pin Micro-Fit 3.0) plug with crimp contact Molex 43030-0007.
Shielding with 6.3mm male spade terminal connector.

5.3 Digital I/O Connector (GPIO)

Pin #	GPIO Signal	GPIO Description	Voltage
1	GPIO1A	DIG_IN1	1.2V
2	GPIO1B	DIG_IN2	1.2V
3	GND_DIO	Ground for digital I/O	
4	NC	Common Ground	
5	GPIO1C	DIG_OUT1	5~34V
6	GPIO1D	DIG_OUT2	5~34V
7	VCC_DIO	Supply output for digital I/O	5~34V
8	VCC	Supply output (based on VDC)	10~30V

Header: Molex 43045-0800 (8-pin Micro-Fit 3.0).
Cable receptacle: Molex 43025-0800 (8-pin Micro-Fit 3.0) plug with crimp contact Molex 43030-0007.
Shielding with 6.3mm male spade terminal connector

6 Software Installation

The unit is preloaded with software that can download and install a selection of OS images over hardwired network. Simply connect a network to the unit through the Ethernet LAN RJ45 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/