# Honeywell WEB-HMI TOUCHSCREEN MONITORS



## GENERAL

The WEB-HMI series of touchscreen monitors are HTML5 IP browser compatible touchscreen monitors. They combine state-of-the-art features and top performance with an outstanding design.

#### **INSTALLATION INSTRUCTIONS**

WEB-HMI touch panels are available in 5 different sizes which offer 2 tiers of visualization and connectivity performance:

- 1. Direct controller access (Browse in controller)
- 2. System wide controller access (Browse into the system)

WEB-HMI seamlessly integrates with CIPer Model 10, CIPer Model 30, CIPer Model 50, and WEB-8000 delivering robust performance and comprehensive insight from the controller or building system.

## INSTALLATION

- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazard-ous condition.
- 2. Check ratings given in instructions and on the product to ensure the product is suitable for the application.
- 3. Installer must be a trained, experienced service technician.
- 4. After installation is complete, check out product operation as provided in these instructions. ordering information

	WEB-HMI4/C	WEB-HMI7/C	WEB-HMI10/CX	WEB-HMI15/C	WEB-HMI21/C
Туре	4.3" HTML5 Web	7" HTML5 Web	10.1" HTML5 Web	15.6" HTML5 Web	21.5" HTML5 Web
	Panel, resistive	Panel, resistive	Panel,	Panel,	Panel,
	touch	touch	capacitive touch	capacitive touch	capacitive touch
Description	4.3" HTML5 Web	7" HTML5 Web	10.1" HTML5 Web	15.6" HTML5 Web	21.5" HTML5 Web
	Panel, TFT color,	Panel, TFT color,	Panel, TFT color,	Panel, TFT color,	Panel, TFT color,
	480 × 272 pixel,	800 × 480 pixel,	1280 × 800 pixel,	1366 × 768 pixel,	1920 × 1080 pixel,
	resistive touch	resistive touch	capacitive multi	capacitive multi	capacitive multi
	screen,	screen,	touch screen,	touch screen,	touch screen,
	1 Ethernet port,	1 Ethernet port, 1	3 Ethernet port, 2	3 Ethernet port, 2	3 Ethernet port, 2
	1 USB host port	USB host port	USB host port	USB host port	USB host port

# ORDERING INFORMATION

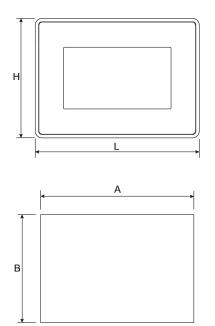
#### Table 1. HMI Touch panel models

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# DIMENSIONS

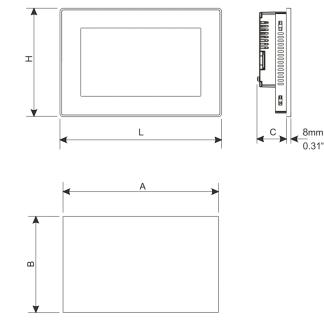
## **Resistive touch panel**



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	WEB-HMI4/C	WEB-HMI7/C
А	05.35" (136 mm)	06.90" (176 mm)
В	03.78" (96 mm)	05.35" (136 mm)
D	01.14" (29 mm)	01.14" (29 mm)
Н	04.21" (107 mm)	05.79" (147 mm)
L	05.78" (147 mm)	07.36" (187 mm)
Т	00.19" (5 mm)	00.19" (5 mm)
CSD	13.77" (350 mm)	19.68" (500 mm)
CSD2	07.87" (200 mm)	15.74" (400 mm)

## **Capacitive touch panel**



**Table 3. Dimensions** 

	WEB- HMI10/CX	WEB- HMI15/C	WEB- HMI21/C
А	10.66" (271 mm)	16.18" (411 mm)	21.30" (541 mm)
В	07.32" (186 mm)	10.00" (256 mm)	13.22" (336 mm)
С	02.20" (56 mm)	02.20" (56 mm)	02.20" (56 mm)
н	07.75" (197 mm)	10.50" (267 mm)	13.66" (347 mm)
L	11.10" (282 mm)	16.60" (422 mm)	21.73" (552 mm)
CSD	45.28" (1150 mm)	70.87" (1800 mm)	86.61" (2200 mm)
CSD2	29.53" (750 mm)	51.18" (1300 mm)	51.18" (1300 mm)

CSD = Minimum Compass Safe Distance of standard compass.

CSD2 = Minimum Compass Safe Distance of steering compass, standby steering compass, emergency compass.

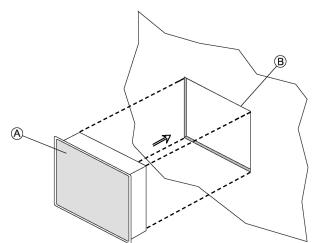
#### NOTE:

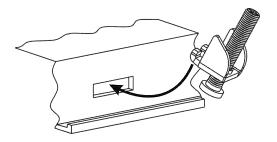
**Resistive touch panels**: Check that graphic panels are mounted completely inside in enclosures satisfying minimum IP54 degree of protection for application in zone 2 and IP6x for application in zone 22.

**Capacitive touch panels:** Check that graphic panels are mounted in enclosures satisfying minimum IP54 degree of protection for category 3G and IP6x for category 3D and the requirements relating to the 3G or 3D categories in Zones 2/22 (Category 3: normal level of protection – G: Gas – D: Dust).

# INSTALLATION PROCEDURE

Place the fixing brackets contained in the fixing kit as shown below





- A WEB-HMI
- B Installation cut-out (\*)

#### Table 4. Fixing Bracket

Model	Number of pieces
WEB-HMI4/C	4 pieces
WEB-HMI7/C	4 pieces
WEB-HMI10/CX	9 pieces
WEB-HMI10/C	12 pieces
WEB-HMI21/C	14 pieces

#### CAUTION

Tightening torque for resistive touch panel: 75Ncm or screw each fixing screw until the bezel corner gets in contact with the panel.

Tightening torque for capacitive touch panel: 130Ncm or screw each fixing screw until the bezel corner gets in contact with the panel.

#### 

Power, input and output (I/O) wiring must be in accordance with class i, division 2 wiring methods, article 501.10 (b) of the national electrical code, NFPA 70 for installation in the U.S., or as specified in section 18-1J2 of Canadian electrical code for installations within Canada and in accordance with the authority having jurisdictions.

Substitution of any component may impair suitability for class i, division 2

When in hazardous locations, turn off power before replacing or wiring modules

Do not disconnect equipment while the circuit is live or unless the area is know to be free of ignitable concentrations.

Do not change battery unless the area is known to be free of ignitable concentrations

This equipment, except for the front panel display, is an open-type device and is required to be installed in an enclosure suitable for the environment such that the internal part of the equipment is only accessible with the use of a tool.

Suitable for use in Class I, Division 2, Groups A, B, C And D Hazardous Locations, Or Nonhazardous Locations Only.

# CONNECTIONS

## **Resistive touch panel**

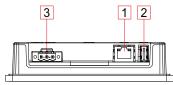


Figure 1. Resistive touch panel rear view

#### Table 5. Resistive touch panel ports

Callout	Specification
1	Ethernet port
2	USB port (version 2.0, 5V 500mA max)
3	Power supply (18-32Vdc)

## Capacitivie touch panel

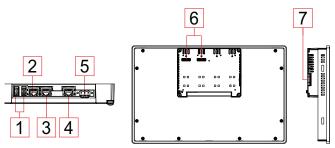


Figure 2. Capacitive touch panel rear view

#### Table 6. Capacitive touch panel ports

Callout	Description
1	USB port V2.0, max. 500 mA - for maintenance only
2	Ethernet port 2 (10/100 Mb)
3	Ethernet port 1 (10/100 Mb)
4	Ethernet port 0 (10/100/1000 Mb)
5	Power supply
6	2 Expansion slots for plugin modules (not supported)
7	SD Card Slot (not supported)

#### 

(USB Connectors) Not for use in hazardous locations.

(Ethernet, USB connectors, memory card slot) Do not connect or disconnect unless the power has been disconnected or the area is known to be free of ignitable concentrations.

#### 

All ports are SELV (Safety Extra - Low Voltage) according European Standards and Class 2 according UL Standards

Don't open the panel rear cover when the power supply is applied.

## POWER SUPPLY, GROUNDING AND SHIELDING

The power supply terminal block is shown in the figure below.

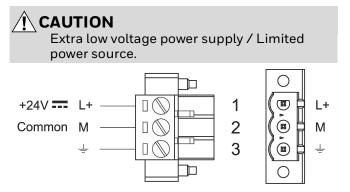


Figure 3. Power supply terminal block

DC Power Connector - AWG24 wire size - R/C Terminal Blocks (XCFR2), Female pitch 5.08mm, torque 4.5 lb-in (50Ncm)

#### 

Do not separate when energized

#### 

Don't open the panel rear cover when the power supply is applied.

Do not open the cabinet while the system is powered up.

The unit must always be grounded to earth. Earth connection will have to be done using either the screw or the faston terminal located near the power supply terminal block. Also connect to ground the terminal 3 on the power supply terminal block.

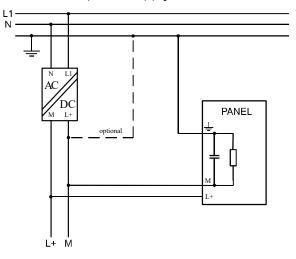


Figure 4. Suggested wiring for the power supply

#### CAUTION

Ensure that the power supply has enough power capacity for the operation of the equipment.

The power supply circuit may be floating or grounded. In the latter case, connect to ground the power source common as shown in *Figure.* 4 on this page with a dashed line.

When using the floating power scheme, note that the HMI devices internally connects the power common to ground with a 1M Ohm resistor in parallel with a 4.7nF capacitor.

The power supply must have double or reinforced insulation.

# Usage in explosion-hazardous areas zone 2 and zone 22

## 

Confirm that the location is free from explosively hazardous gases or dust before connecting or disconnecting equipment, replacing or wiring modules. Confirm that the power supply has been turned OFF before disconnecting, replacing or wiring modules.

Before turning ON, clean the front panel of the graphic panel with a damp cloth to avoid any electrostatic discharge.

The graphic panel must not be exposed to direct sunlight.

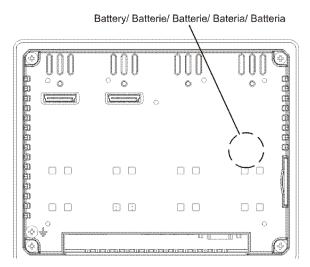
The vents in the panel casing must not be obstructed.

Do not allow layers of dust to form on the graphic panel: it should be cleaned regularly making clean with a damp cloth.

Ensure that the labeling specifications are compatible with the conditions permitted for the hazardous area at the site where it is being used (Zones 2/22 Group II: Surface industries - Category 3: Normal level of protection - G: Gas - D: Dust - IP: degree of protection (protection against solids and liquids) - T: maximum surface temperature).

# DISPOSAL

## **Disposal of Batteries**



Capacitive touch panels are equipped with rechargeable Lithium battery, these are not userreplaceable.The following information is maintained by the battery:

Hardware real-time clock (date and time)

**Charge**: At first installation, it must be charged for 48 hours. When the battery is fully charged, it ensures a period of 3 months of data back-up at 77°F (25°C).

#### CAUTION

Dispose the batteries according to local regulations.



#### WEEE DIRECTIVE

This device cannot be disposed of as a domestic waste but according to WEEE European Directive 2012/19/EU

# STANDARDS AND APPROVALS

#### **Resistive touch panels**

The products have been designed for use in an industrial environment in compliance with the 2014/30/EU EMC Directive.

The products have been designed in compliance with:

EN 61000-6-4 EN 61000-6-3	EN 55011 Class A EN 55022 Class B
EN 61000-6-2 EN 61000-6-1	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8
EN 60079-0	
EN 60079-7	
EN 60079-11	

## Special instruction for use

- The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC/EN 60664-1.
- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC/EN 60079-7.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.

## **Capacitive touch panels**

The products have been designed for use in an industrial environment in compliance with the 200GM14/30/EU EMC Directive.

The products have been designed in compliance with:

EN 61000-6-4	CISPR 22 Class A CISPR 16-2-3
EN 61000-6-2	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11 EN 61000-4-29 EN60945

The installation of these devices into the residential, commercial and light-industrial environments is allowed only in the case that special in measures are taken in order to ensure conformity to EN 61000-6-3.

The products are in compliance with the Restrictions on Certain Hazardous Substances (RoHS) Directive 2011/65/EU.

In compliance with the above regulations the products are CE marked.

In compliance with the above regulations the products are CE marked.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference,
- 2. This device must accept any interference received, including interference that may cause undesired operation.

## **Declaration of REACH conformity**

#### Article 33 Communication

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006

Honeywell takes compliance with REACH very seriously.

According to Article 33 "Duty to communicate information on substances in articles":

- 1. Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1 % weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.
- On request by a consumer any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1 % weight by weight (w/w) shall provide the consumer with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

Our duty is to inform you that the substance(s) listed below may be contained in these products above the threshold level of 0.1% by weight of the listed article.

#### Table 7. Capacitive touch panels

SVHC Substance	CAS Number
Lead	7439-92-1
Diboron trioxide	1303-86-2
Lead titanium zirconium oxide	12626-81-2
4,4'-isopropylidenediphenol [Bisphenol A; BPA]	80-05-7

#### Table 7. Capacitive touch panels

SVHC Substance	CAS Number
Lead monoxide (lead oxide)	1317-36-8
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	25973-55-1
2-methyl-1-( 4-methylthiophenyl)-2- morpholinopropan-1-one	71868-10-5
Decamethylcyclopentasiloxane (D5)	541-02-6
Boric acid	10043-35-3 / 11113-50-1
Lead (II) oxide	1317-36-8
Octamethylcyclotetrasiloxane (D4)	556-67-2
Decamethylcyclopentasiloxane (D5)	541-02-6
Dodecamethylcycloexasiloxane (D6)	540-97-6

#### Table 8. Resistive touch panels

SVHC Substance	CAS Number
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4
Lead	7439-92-1
4,4'-isopropylidenediphenol [Bisphenol A; BPA]	80-05-7
Diboron trioxide	1303-86-2
Lead titanium zirconium oxide	12626-81-2

Any further information will be available on request.

The declaration does not concern the supply of components by the customer, intended to be part of the finished product to be supplied to the customer.

We confirm that our products do not use any other REACH restricted materials during the manufacturing, storage or handling process.

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