

HCiRX Series

Honeywell Controller Interface

Specification

Overview

HCiRX/W series operator interfaces allow operator to access all controller functions through custom graphics and touch screen interface on color LCD display. Touch Screen (Analog/Resistive Type)

HCiRX05 – T

5.7" Color TFT LCD (16M colors)

HCiRW05 – T

5." Wide Color TFT LCD (16M colors)

HCiRW07 – T

7" Wide Color TFT LCD (16M colors)

HCiRX08 – T

8.4" Color TFT LCD (16M colors)

HCiRX10 – T

10.4" Color TFT LCD (16M colors)

HCiRW10 - T

10.2" Wide Color TFT LCD (16M colors)

HCiRX12 – T / A

12.1" Color TFT LCD (16M colors)

HCiRX15 – T

15.0" Color TFT LCD (16M colors)

Features

• Color TFT LCD (HCiX 05/08/10/12 /15, HCiW05/07/10)

Color TFT LCD is standard on all HCiRX models. It is a high quality display with wide viewing angle. It provides up to 65,536 real colors.

• Touch Screen (Resistive Type)

Operator can do changes to parameters by touching the screen directly. It offers much easier operation than the conventional keyboard.

• Hi-perform Processor and Linux

The HCiRX uses a 32 bit RISC CPU for

high speed graphic processing based on Linux system

• IP65F Front Enclosure

Front face is IP65F rated to permit use in tough applications where the HCiRX is subjected to moisture, dust etc.

• Communication

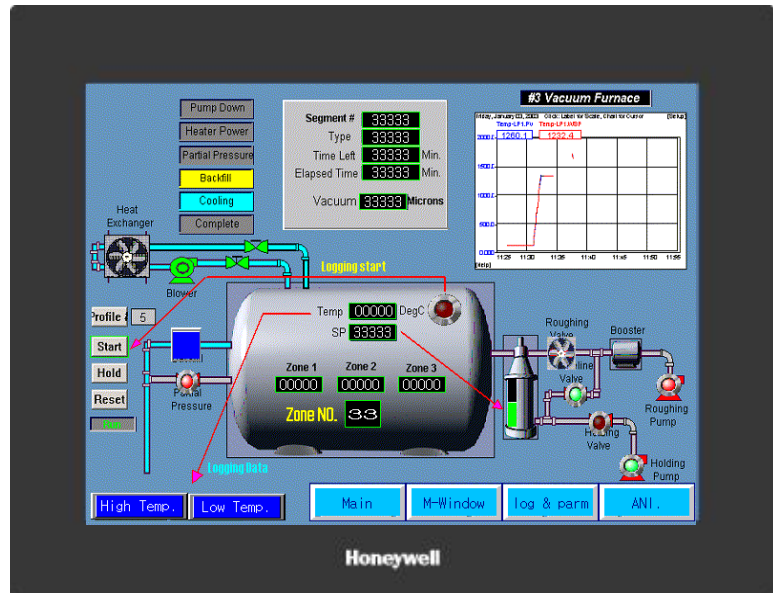
RS-232C and RS-422/485 serial ports and Ethernet are standard features.

Additionally optional communication adapter is also supported. Custom interface designs can be downloaded via RS-232C, Ethernet and USB communication and by using USB devices(memory, printer).

Wide protocol : OPC-UA(Client), DNP3

• Data storage(option)

HCiRX support SD/SDHC Card and USB memory interface to log high capacity data. The logged data can be analyzed and printed via MS Excel or CSV file viewer program.



• Multi-Language Support

Language selection can be made on screen.

English/Korean/Chinese/Arabic/Cyrillic, and be used Fonts of Windows system.

• Designing Tool-Intuitive graphical

HCi Design Studio software is offered as standard package. Custom designed graphics can be variables, and those variables can be selected without register addressing.

Simulation-Modbus

• Various Objects (Tags)

HCi Design Studio offers wide verity of design tools such as numeric, lamp, message, alarm, keypad, graph, animation, slides, window etc. It makes the design of displays (Monitoring / Operating) a breeze.

Specifications

MODEL		HCiRX 05 - TE	HCiRX 08 – TE	HCiRX10 - TE	Remark
Screen Size		5.6 "	8.4 "	10.4"	
Resolution		640 x 480	800 x 600	800 x 600	
LCD Color		TFT 16M Colors	TFT 16M Colors	TFT 16M Colors	
Brightness		450 cd / m ²	350 cd / m ²	400 cd / m ²	
Touch Type		Analog Resistive	Analog Resistive	Analog Resistive	
Touch Cell		640 x 480	800 x 600	800 x 600	
CPU		32 bit RISC	32 bit RISC	32 bit RISC	
Flash Memory		128MB	128MB	128MB	
Operating Power		24Vdc (DC 20 – 28 V)	24Vdc (DC 20 – 28 V)	D : 24Vdc A : AC 85 – 264 V	D : DC 20 – 28 V
Power Consumption		Max. 15 W	Max. 15 W	Max. 18 W	
Operating Temperature		-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	
Storage Temperature		-20 to +70 °C	-20 to +70 °C	-20 to +70 °C	
Ambient Humidity		Below 85% RH	Below 85% RH	Below 85% RH	
Approvals		CE	CE	CE	
Front Enclosure		IP65F	IP65F	IP65F	
Insulation Resistance		10 MΩ(500Vdc)	10 MΩ(500Vdc)	10 MΩ(500Vdc)	
Ground		Class 3 (under 100Ω)	Class 3 (under 100Ω)	Class 3 (under 100Ω)	
Noise Endurance (impulse)		1000 Vp-p (pulse width 1μs)	1000 Vp-p (pulse width 1μs)	1500 Vp-p (pulse width 1μs)	
Vibration Endurance (X-Y-Z 1G)		10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	
Internal Communication		USB(Front), Ethernet	USB(Front), Ethernet	USB(Front), Ethernet	
USB Host(rear)		V2.0, Bar code scanner	V2.0, Bar code scanner	V2.0, Bar code scanner	
External Communication	COM1	RS-232C, RS-422/485	RS-232C, RS-422/485	RS-232C, RS-422/485	
	COM2	RS-232C, RS-422/485	RS-232C, RS-422/485		
	COM3	-	-	RS485	3 terminals
	Enet	1ch, Ethernet	1ch, Ethernet	2ch, Ethernet	IEEE802.3,10/100Base-T
	Option	-	-	-	Future option
Data storages		SD, SDHC(Max 32GB) USB Storage(max 128GB)	SD, SDHC(Max 32GB) USB Storage(max 128GB)	SD, SDHC(Max 32GB) USB Storage(max 128GB)	
Printer		Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Compliant to PCL3 or later
External Dimension (W x H x D)		172 x 140 x 59 (mm) 6.69 x 5.43 x 2.36(inch)	236 x 181 x 59 (mm) 9.3 x 7.2 x 2.36(inch)	274 x 216 x 59 (mm) 10.79 x 8.6 x 2.26 (inch)	
Weight (kg)		0.7	1.3	2.3	

Specifications

MODEL		HCiRW 05-T	HCiRW 07 - TE	HCiW 10 – TE	
Screen Size		5"	7.0" wide	10.2 " Wide	
Resolution		800 x 480	800 x 480	800 x 480	
LCD Color		TFT 16M Colors	TFT 16M Colors	TFT 16M Colors	
Brightness		350 cd / m ²	350 cd / m ²	350 cd / m ²	
Touch Type		Analog Resistive	Analog Resistive	Analog Resistive	
Touch Cell		800 x 480	800 x 480	800 x 480	
CPU		32 bit RISC	32 bit RISC	32 bit RISC	
Flash Memory		128MB	128MB	128MB	
Operating Power		24Vdc (DC 20 – 28 V)	24Vdc (DC 20 – 28 V)	24Vdc (DC 20 – 28 V)	
Power Consumption		Max. 15 W	Max. 15 W	Max. 15 W	
Operating Temperature		-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	
Storage Temperature		-20 to +70 °C	-20 to +70 °C	-20 to +70 °C	
Ambient Humidity		Below 85% RH	Below 85% RH	Below 85% RH	
Approvals		CE	CE	CE	
Front Enclosure		IP65F	IP65F	IP65F	
Insulation Resistance		10 MΩ(500Vdc)	10 MΩ(500Vdc)	10 MΩ(500Vdc)	
Ground		Class 3 (under 100Ω)	Class 3 (under 100Ω)	Class 3 (under 100Ω)	
Noise Endurance (impulse)		1000 Vp-p (pulse width 1μs)	1500 Vp-p (pulse width 1μs)	1500 Vp-p (pulse width 1μs)	
Vibration Endurance (X-Y-Z 1G)		10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	
Internal Communication		USB(Rear), Ethernet	USB(Front), Ethernet	USB(Front), Ethernet	
USB Host		V2.0, Bar code scanner	V2.0, Bar code/scanner	V2.0, Bar code/scanner	
External Communication	COM1	RS-232C, RS-422/485	RS-232C, RS-422/485	RS-232C, RS-422/485	
	COM2	RS-232C, RS-422/485	RS-232C, RS-422/485	RS-232C, RS-422/485	
	COM3	-	-	-	
	Enet	1ch, Ethernet	1ch, Ethernet	1ch, Ethernet	IEEE802.3,10/100Base-T
	Option	-	-	-	
Data storages		SD, SDHC(Max 32GB) USB Storage(Max 128GB)	SD, SDHC(Max 32GB) USB Storage(Max 128GB)	SD, SDHC(Max 32GB) USB Storage(Max 128GB)	
Printer		Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Compliant to PCL3 or later
External Dimension (W x H x D)		150 x 114 x 60 (mm) 6.69 x 5.43 x 2.36(inch)	212 x 145 x 46 (mm) 8.35 x 5.7 x 1.8(inch)	240 x 216 x 65 (mm) 10.79 x 8.5 x 2.56 (inch)	
Weight (kg)		0.7	0.9	1.9	

Specifications

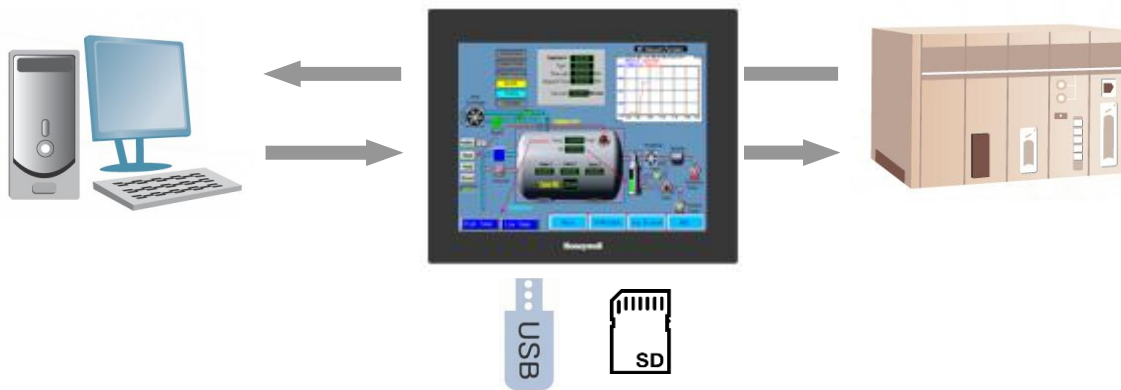
Specifications					
MODEL		HCiRX12 - TE	HCiRX 12 - AE	HCiRX 15 – TE	
Screen Size		10.4"	12.1 "	15.0 "	
Resolution		800 x 600	1024 x 768	1024 x 768	
LCD Color		TFT 16M Colors	TFT 16M Colors	TFT 16M Colors	
Brightness		400 cd / m ²	380 cd / m ²	450 cd / m ²	
Touch Type		Analog Resistive	Analog Resistive	Analog Resistive	
Touch Cell		800 x 600	1024 x 768	1024 x 768	
CPU		32 bit RISC	32 bit RISC	32 bit RISC	
Flash Memory		128MB	128MB	128MB	
Operating Power		D : 24Vdc A : AC 85 – 264 V	D : 24Vdc A : AC 85 – 264 V	D : 24Vdc A : AC 85 – 264 V	D : DC 20 – 28 V
Power Consumption		Max. 18 W	Max. 18 W	Max. 25 W	
Operating Temperature		-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	
Storage Temperature		-20 to +70 °C	-20 to +70 °C	-20 to +70 °C	
Ambient Humidity		Below 85% RH	Below 85% RH	Below 85% RH	
Approvals		CE	CE	CE	
Front Enclosure		IP65F	IP65F	IP65F	
Insulation Resistance		10 MΩ(500Vdc)	10 MΩ(500Vdc)	10 MΩ(500Vdc)	
Ground		Class 3 (under 100Ω)	Class 3 (under 100Ω)	Class 3 (under 100Ω)	
Noise Endurance (impulse)		1500 Vp-p (pulse width 1μs)	1500 Vp-p (pulse width 1μs)	1500 Vp-p (pulse width 1μs)	
Vibration Endurance (X-Y-Z 1G)		10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	10 ≤ F ≤ 25 Hz	
Internal Communication		USB(Front), Ethernet	USB(Front), Ethernet	USB(Front), Ethernet	
External Communication	COM1	RS-232C, RS-422/485	RS-232C, RS-422/485	RS-232C, RS-422/485	
	COM2	RS-232C, RS-422/485	RS-232C, RS-422/485	RS-232C, RS-422/485	
	COM3	RS-485	RS-485	RS-485	3 terminals
	Enet	2ch, Ethernet	2ch, Ethernet	2ch, Ethernet	IEEE802.3,10/100Base-T
	Option	-	-	-	
Data storages		SD, SDHC(Max 32GB) USB Storage(Max 128GB)	SD, SDHC(Max 32GB) USB Storage(Max 128GB)	SD, SDHC(Max 32GB) USB Storage(Max 128GB)	
Printer		Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Print with USB port(PS, PCL Level 3 Language)	Compliant to PCL3 or later
External Dimension (W x H x D)		320 x 261 x 65 (mm) 12.6 x 10.3 x 2.58 (inch)	320 x 261 x 65 (mm) 12.6 x 10.3 x 2.58 (inch)	369 x 300 x 67.2 (mm) 14.5 x 11.81 x 2.55 (inch)	
Weight (kg)		2.5	2.5	3.2	

SD Card and USB Memory Application

Data management system has been improved by using SD Card and USB Memory.

► Saving logged data

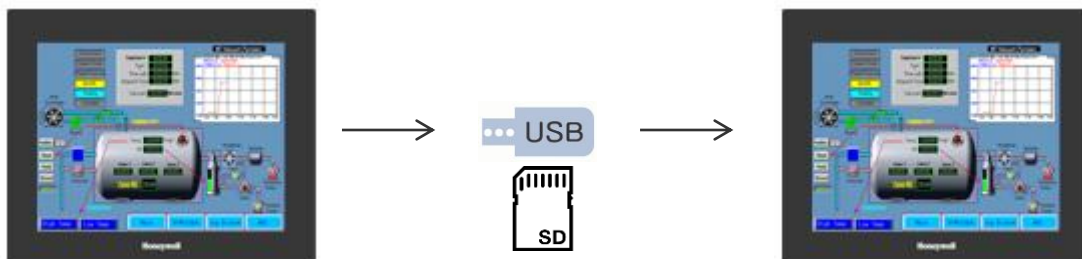
Data logging: Data logged to HCiR is saved to a SD Card or USB Memory as a CSV file format and can be edited in a program like Microsoft Excel.



USB Interface Application

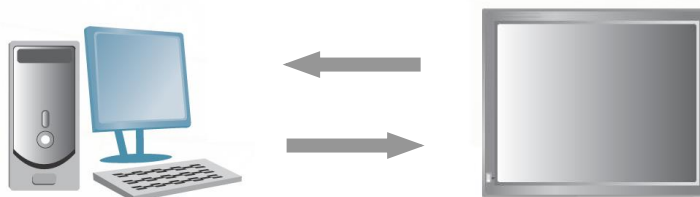
► Data transfer

A configuration file using PC, OS (Operating System), logged data and Recipe can be saved to USB storage and the saved data can be transferred to other HCiRX. The front USB port of HCiRX supports much convenience for the above-mentioned functions.



► Download and Upload (media, USB / Ethernet)

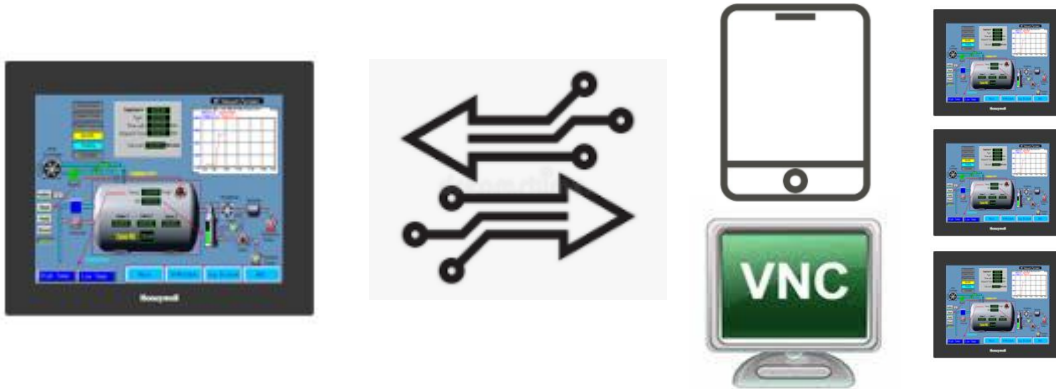
A configuration file can be downloaded or uploaded by using media-USB/Ethernet port rapidly.



Remote View and Control using VNC

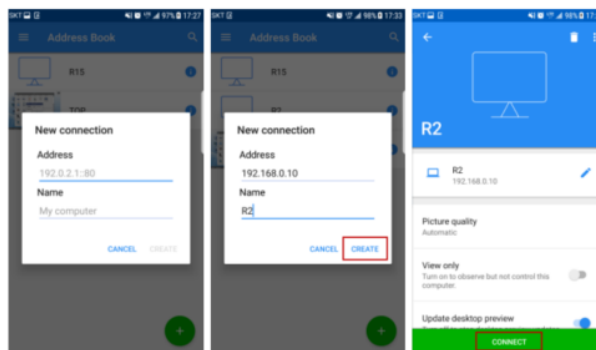
► What is VNC?

VNC® Viewer(Client) gives you instant remote access to HcIR series installed at field site from anywhere locally or globally. User can view the local HMI, and control its smart device as though sitting down in front of it. HcIR series support Client and Server



► How to apply/configure

User can get a viewer tool(RealVNC, Tight VNC, etc) from web or application store for smart devices, and install it and apply it to view operating status and control HMI remotely.



Email and SMS

User can get attractive services thru email and SMS, sending an alarm/messages to operators in the network.

► Sending a message thru email and SMS, Google, Outlook, other email servers.



Connectable PLC List						
Maker	Series	CPU type	CPU Port	Link (I/F Module)	Multi-Drop (1:N)	Ethernet (N:M)
Honeywell	GH1000/500	GH1000/500			●	
	ControlEdge PLC, RTU	Modbus				●
		OPC UA(Client)				●
	HC900	C30/C50/C70/C70R			●	●
	Master Logic	200/50	●	◆	●	●
	SAIA BURGESS	PCD series				●
Modbus					●	●
BACnet	DDC(MSTP)				●	
DNP3		DNP3(Client)				●
Mitsubishi		A/Q series	●	◆	●	●
Omron		NJ series	●	◆	●	●
Modicon (Schneider)	Modbus	884/984A/984B/984X		◆	●	
		Slot-mount984		◆	●	
	TWIDO	LCAA 10DRF	●	◆	●	
		LCAA 16DRF	●	◆	●	
		LCAA 24DRF	●	◆	●	
		LMDA 20DTK	●	◆	●	
		LMDA 20DUK	●	◆	●	
		LMDA 20DRT	●	◆	●	
		LMDA 40DTK	●	◆	●	
		LMDA 40DUK	●	◆	●	
		Modbus TCP				●
Rockwell (AB)	PLC5	PLC5/11/20/30/40/40 L/60/60L	●			
	SLC500	SLC5/03/04	●			
	Control Logix	1200/1756	●			
Siemens	SIMATIC S7-300	312IFM/313/314/315/315-2DF				●
Fieldbus	Ethernet/IP					◆

Note 1)

1. The CPU port is a case using the CPU communication ports of PLC.
2. The Link(I/F Module) is a case using the communication interface card to be added to PLC slot.
3. The Multi-Drop is a case which the 1:N communication is available.

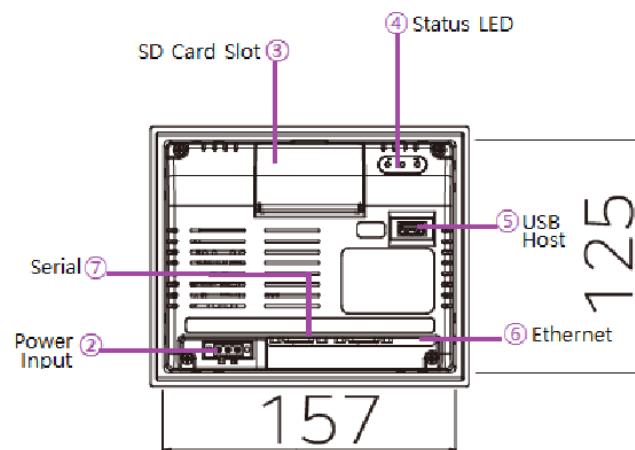
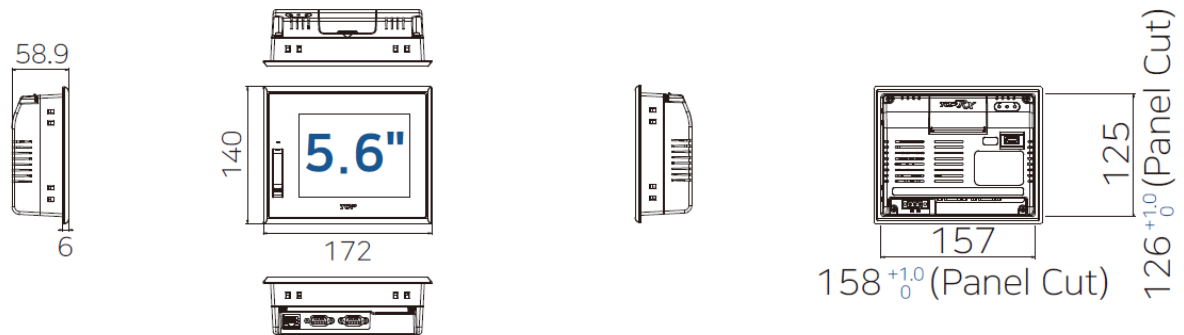
Note 2)

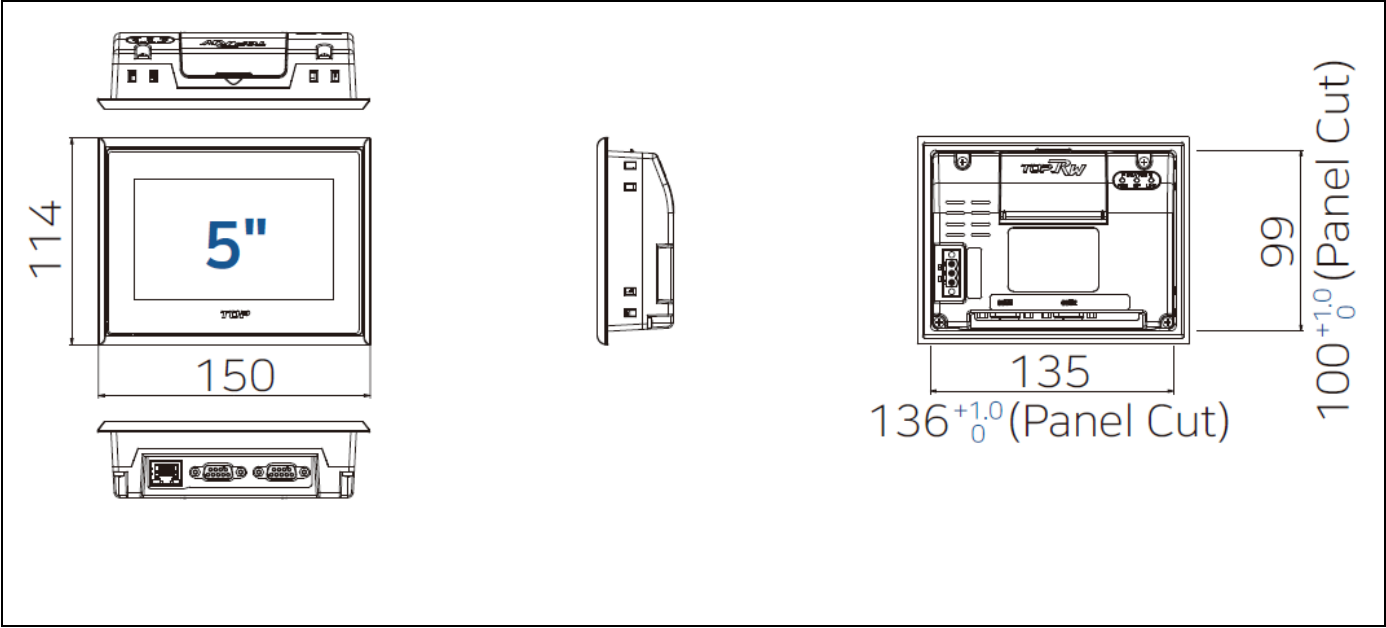
The connectable PLCs will be added continuously. Please contact Honeywell.

External Dimension

HCiRX05

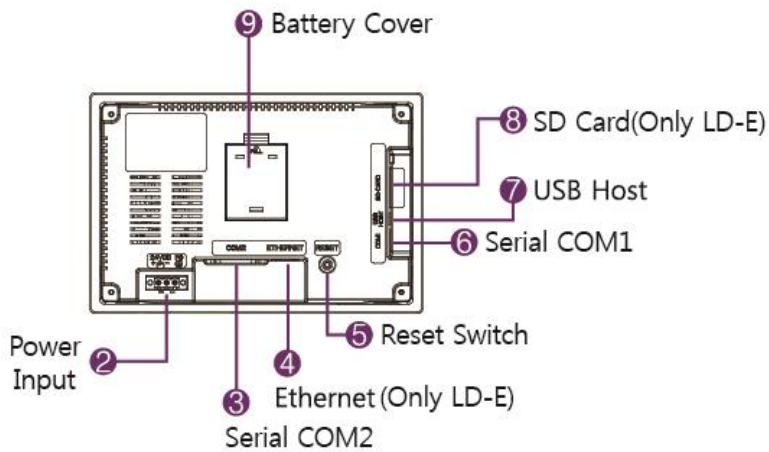
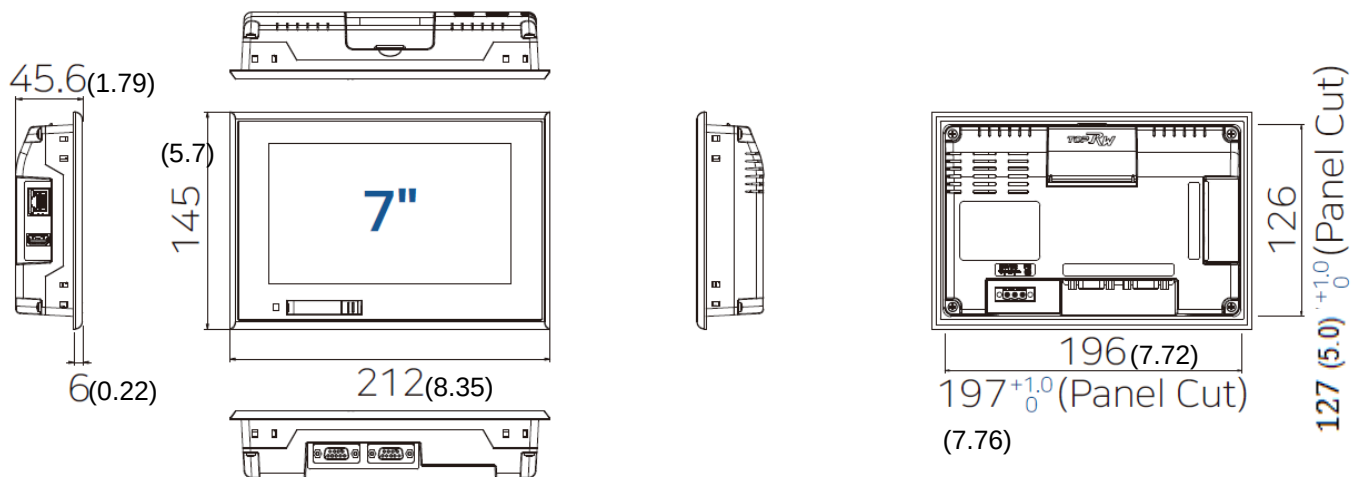
Unit : mm / inch

**HCiRW05**



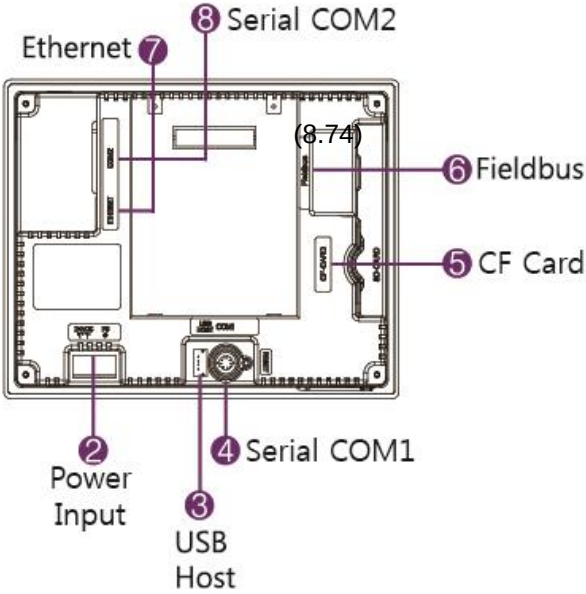
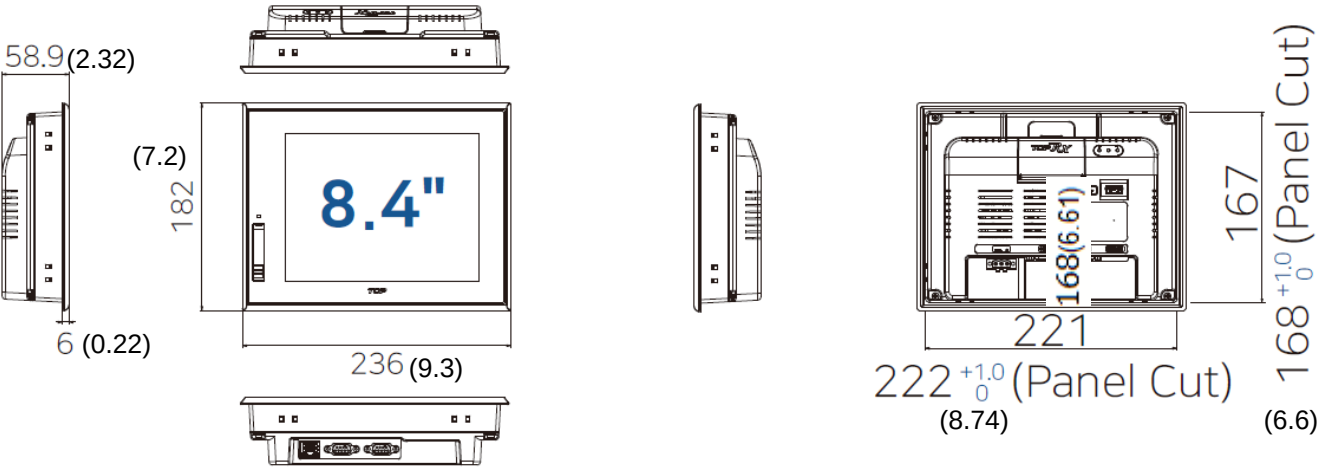
External Dimension

HCIRW07-TE



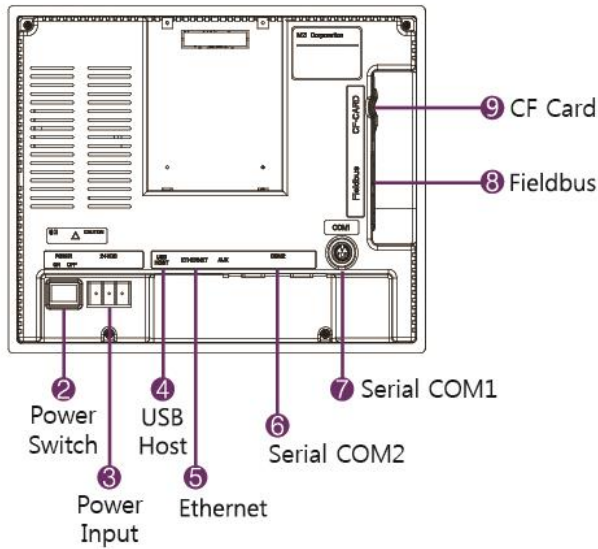
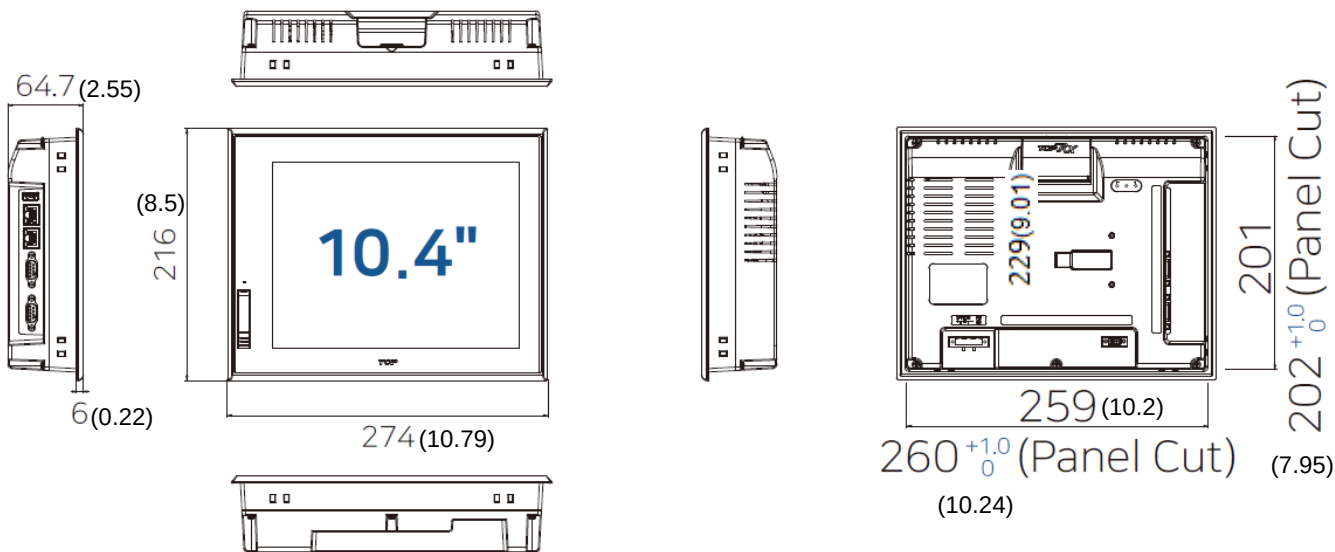
External Dimension

HCIRX08



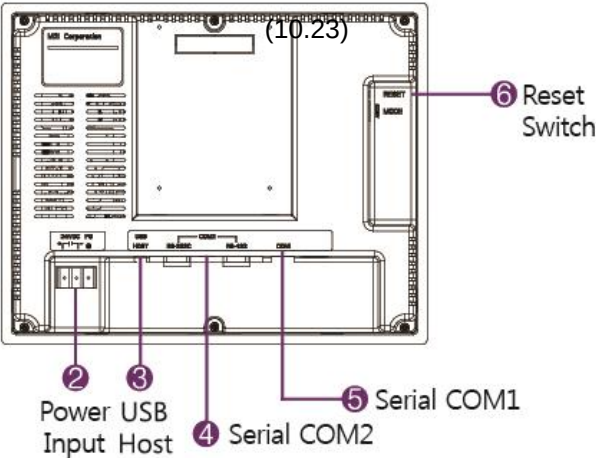
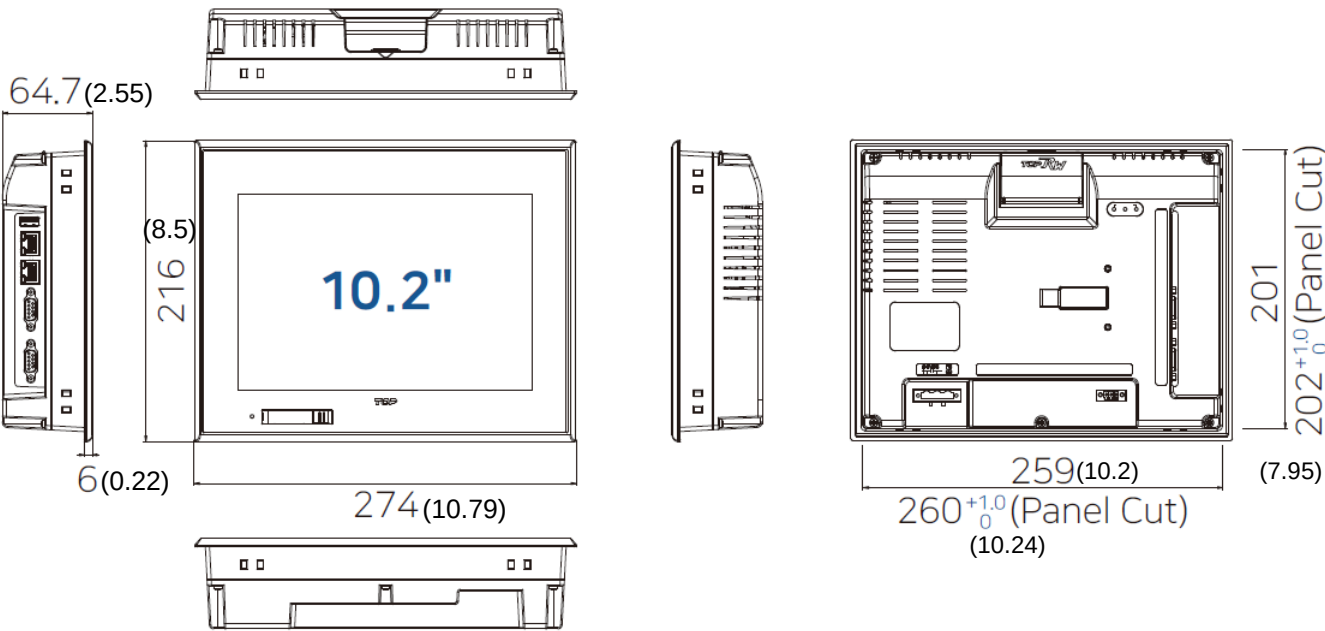
External Dimension

HCiRX10



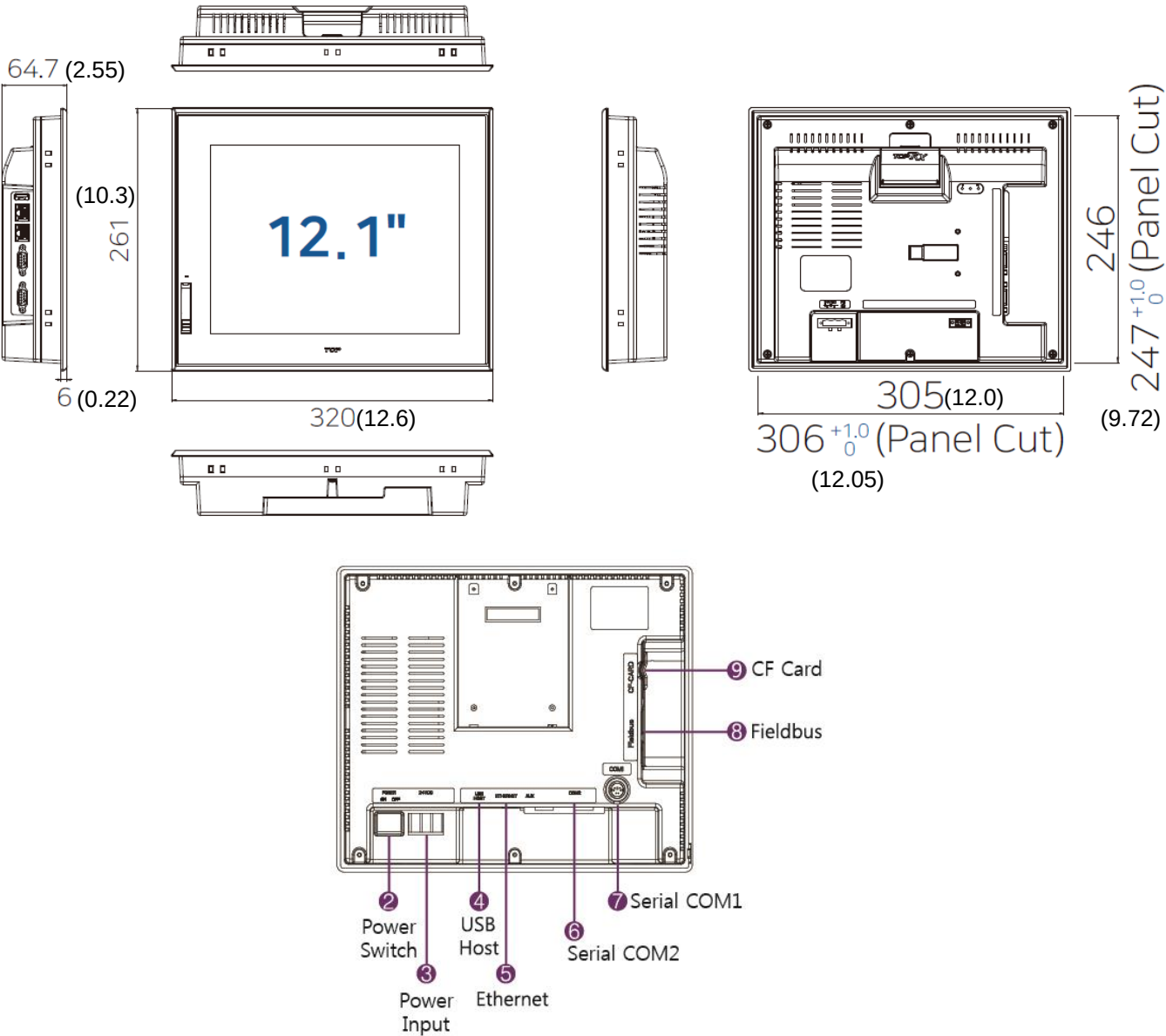
External Dimension

HCiRW10



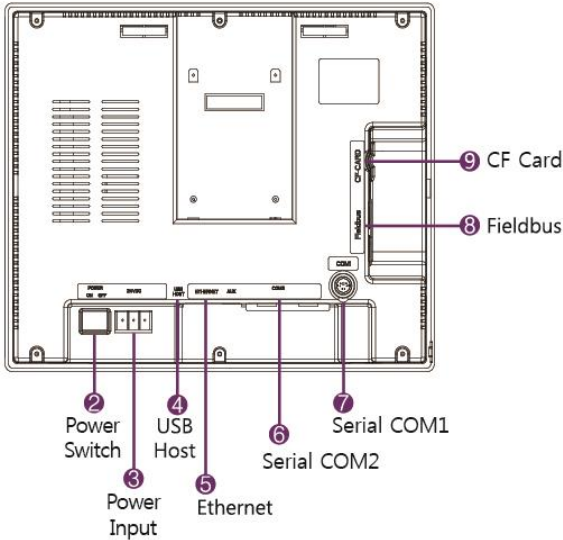
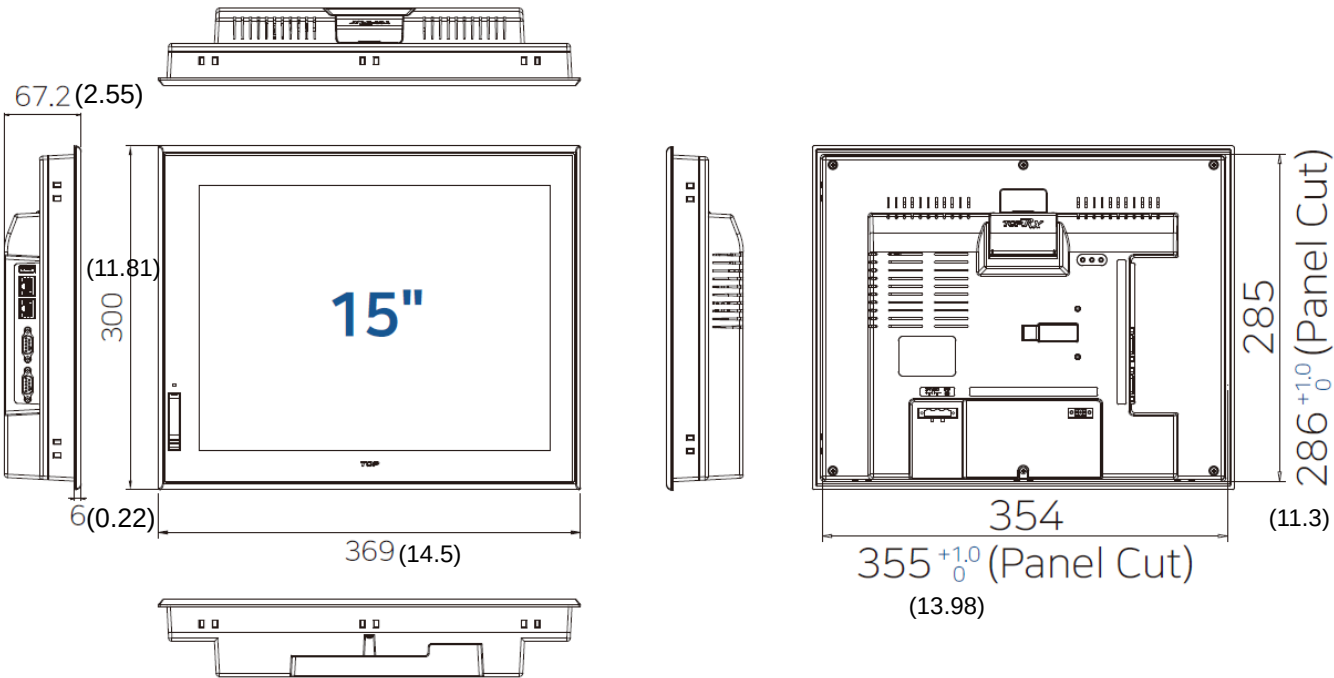
External Dimension

HCiRX12



External Dimension

HCIRX15



Panel Cutout

MODEL	HCiRX05	HCiRW05	HCiRW07	HCiRX08	HCiRX10	HCiRW10	HCiRX12	HCiRX15
Panel Cutout								
W (mm) x H (mm)	158 x 125	158 x 125	197 x 127	222 x 168	260 x 202	260 x 202	306 x 247	355 x 286
W(inch) x H(inch)	6.22 x 4.92	6.22 x 4.92	7.76 x 5.0	8.74 x 6.61	10.24 x 7.95	10.24 x 7.95	12.05 x 9.72	13.98 x 11.26
Weight(kg)	0.7	0.7	0.8	1.3	2.3	1.9	2.5	3.2

Model Number Interpretation

Instruction

- Select the desired key number. The arrow to the right marks the selection available
- Make the desired selections from Table I through Table III using the column below the proper arrow.

A dot (•) denotes the availability

Key Number
HCiR - - -

KEY NUMBER

Description	Selection	Availability							
Display Size									
5.7"	HCiRX 05	↓							
5" Wide	HCiRW 05		↓						
7" Wide	HCiRW 07			↓					
8.4"	HCiRX 08				↓				
10.4"	HCiRX 10					↓			
10.2" Wide	HCiRW 10						↓		
12.1"	HCiRX 12							↓	
15.0"	HCiRX 15								↓

TABLE I - LCD TYPE & COMMUNICATION

LCD Type	TFT Color LCD(SVGA) TFT Color LCD(XGA)	T _ A _	•	•	•	•	•	•	•	•
Communication	RS-232C, RS-485, Ethernet, USB, CF/SD Card RS-232C, RS-485, USB	_ E _ V	•	•	•	•	•	•	•	•

TABLE II - Options

Front USB Port	None Front USB Port	N _ F _	•	•	•	•	•	•	•	•
Operating Power	20 to 24 Vdc 85 to 264 Vac	_ D _ A	•	•	•	•	•	•	•	•

TABLE III - COMMUNICATION OPTION & LANGUAGE

Communication Options	None Profibus Devicenet	N _ P _ D _	•	•	•	•	•	•	•	•
Future Option	Common, media(Design software) & config cable Special, media(Design software) & Dig. IO	_ C _ K _ L	•	•	•	•	•	•	•	•

ORDERING INSTRUCTIONS

- Orders may be placed only by model selection (not by part number)
- Orders placed by model selection are systematically protected against incompatibility.

Warranty / Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose**. Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use. While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications are subject to change without notice.

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