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TOP NEXT



TOP NEXT

Product Catalog

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MX On Corporation Is an AX·DX-Based Smart Factory Total Solution Platform Company with Technical Expertise Extending from HMI/SCADA Development and Manufacturing to Robot Control and Logistics Automation.

TOP NEXT

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TOP NEXT LINE-UP



TOP RT 40 PREMIUM Ex 15 12 10

Next-Generation TOPR Series Premium HMI Featuring High-Speed Performance, IrDA Sensor, and Wide-Angle Camera

Ex / Non-Ex Premium HMI



TOP RT WIDE PREMIUM Ex 19 15

Capacitive Touch, Wide Display, High-Speed Performance, and Advanced Features Including Wi-Fi, Bluetooth, IrDA, and Wide-Angle Camera

Ex / Non-Ex Premium Wide HMI



TOP RC WIDE STANDARD Ex 19 15 12

Capacitive Touch, Wide Display, and High-Speed Performance, Setting a New HMI Standard

Ex / Non-Ex Standard Wide HMI



TOP RW 10 7

High-Efficiency All-in-One HMI Integrating Analog and Digital I/O

HMI with Integrated I/O



TOP RP Box-Type HMI with Compact Design, Enhancing Flexibility in System Configuration
Box Type HMI

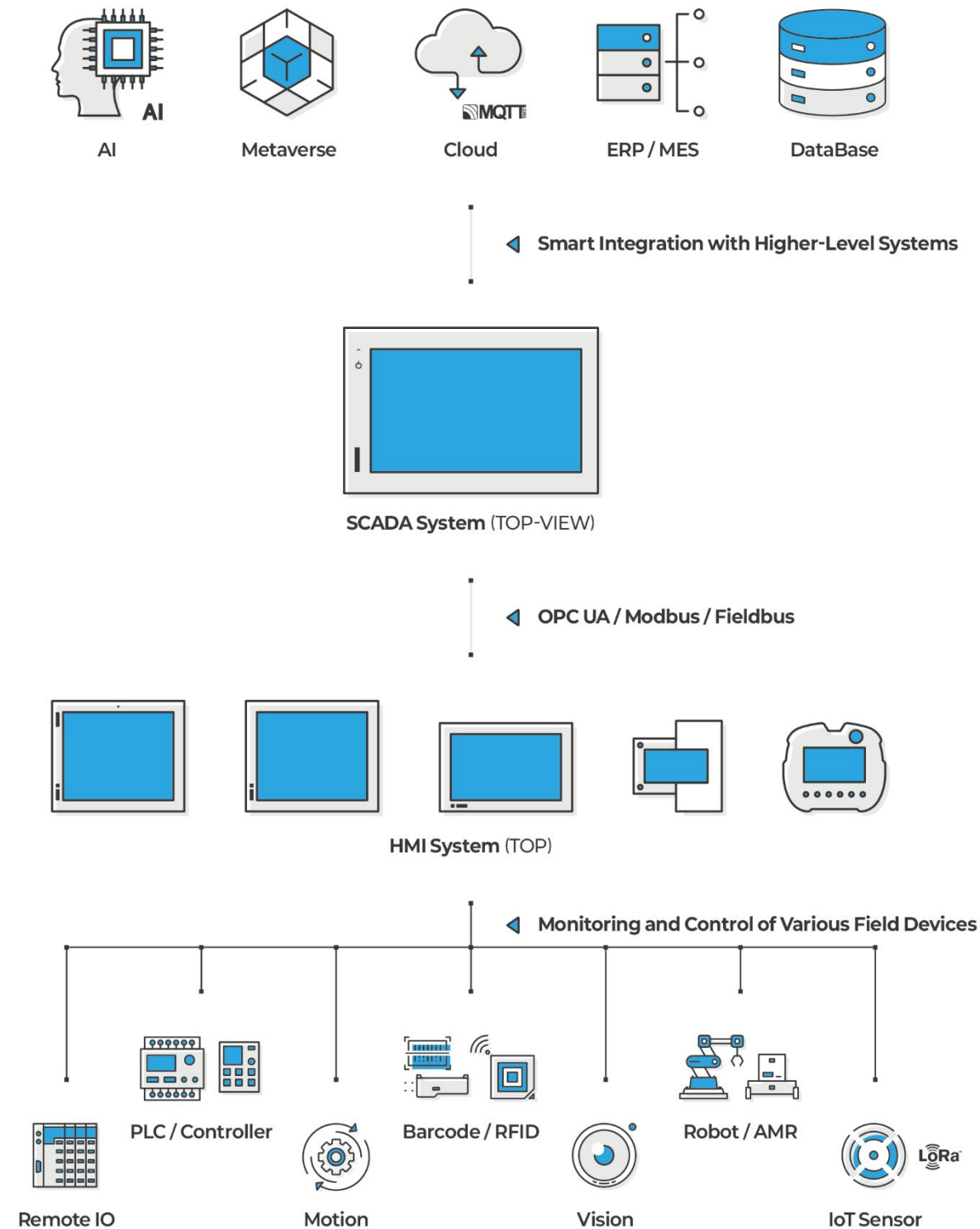


TOP RN 10 7 4

Open Frame HMI Optimized for Free Design and Customization

Open Frame HMI

HMI (TOP) / SCADA (TOP-VIEW) Operation in Industrial Sites



KEY FEATURES

400+ Protocol

Supports Over 400 Industrial Communication Protocols

Provides Stable Data Integration Between Equipment and Systems by Supporting a Wide Range of Industrial Communication Protocols, Enabling Flexible System Configuration and Operation Even in Complex Industrial Environments.

21 CFR Part 11

21 CFR Part 11 Compliance

Compliant with the U.S. FDA's 21 CFR Part 11 Standards, Providing a Safe and Efficient Work Environment Through Operator Authentication, Supervisory Control History Tracking, Database Management, and PDF Management.

OPC UA

Industrial-Standard OPC UA Support

Through the Forward-Looking and Highly Extensible OPC UA Protocol, It Enables Reliable Data Collection and Management, Ensuring Seamless Integration with Higher-Level Systems.

SECS / GEM

SECS / GEM Protocol Support

Supports HSMS SECS/GEM Communication Protocols Used in the Semiconductor Industry, Providing Reliable Data Communication Tailored to Specific Operational Scenarios.

VNC

Proprietary VNC Provided

Our High-Performance, In-House Developed VNC Allows Remote Access to TOP & TOP-VIEW Screens in Industrial Environments, Enabling Real-Time Monitoring and Control via Mobile Devices, Tablets, and PCs.

SMS & Email

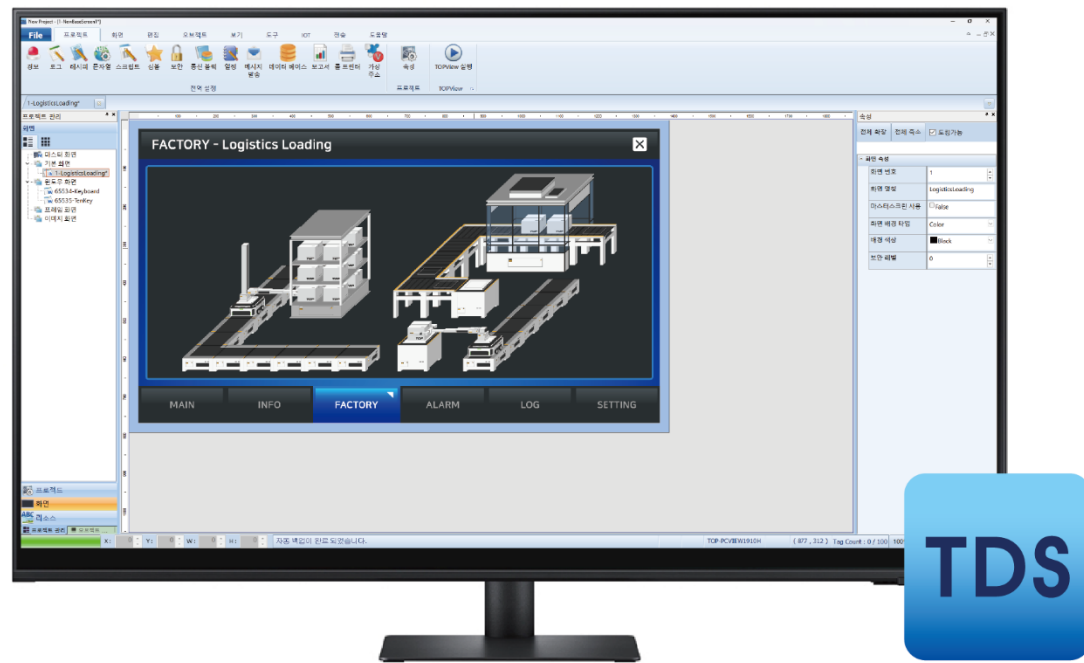
SMS & Email Dispatch

Automatically Sends SMS and Emails Stored in the Program According to On-Site Conditions, Allowing Supervisors or Customers to Instantly Check the Factory Status.

TOP Design Studio

TOP Design Studio Is Software for Creating and Editing HMI Project Files.
It Is Available for Free Download on the MX On Website (mxon.co.kr).

- **Intuitive UI** – Easy for Everyone
- **Legacy Model Migration** – ATOP / XTOP Compatible
- **Vivid Animations** – Smooth and Lifelike
- **Structured User Training** – Supported at Headquarters and Daegu Sales Office
- **YouTube Training Content** – Accessible Anytime, Anywhere
- **KakaoTalk Technical Support** – Instant Assistance On-Site



TOP Design Studio

KEY FEATURES



Function Implementation Integrated via [Effects & Actions]

Regardless of the Object's Shape or Type, Functions Can Be Implemented in a Consistent Manner Using the [Effects & Actions] Properties. Structured as [Condition] → [Effect] → [Action], the Specified Effect or Action Is Executed When the Condition Is Met.



Offline / Online Virtual Operation

Offline Virtual Operation:

Allows Direct Project Testing in TDS Without TOP or Controller.

Online Virtual Operation:

Enables Simultaneous Project Testing in TDS While Running the Actual Program on a PC-Connected Controller. (2-Hour Limit)



Continuously Updated Image Library

Offers a Variety of 16M Full-Color Images, Including Vector Images That Maintain Sharp Quality Regardless of Size, and 3D Libraries with Enhanced Depth Perception.



Optimized Data Analysis

TDS Enables Efficient Data Searching and Monitoring in Tabular Format, and Supports Intuitive Data Analysis Through Various Graphs Such as Trend, Record, Bar, Meter, and Pie Charts.

JavaScript

JavaScript Programming Support

Utilize the Widely Used JavaScript to Efficiently Extend Projects in TDS. From Simple Commands to Conditional Statements, Loops, and Functions, Various Programming Constructs Can Be Easily Implemented with Provided Samples.



Project Interoperability Between HMI and SCADA

TDS Supports Both TOP (HMI) and TOP-VIEW (SCADA) Projects, Allowing Seamless Conversion Between the Two.

TOPRT40 SERIES

Ex / Non-Ex Premium HMI

INTERFACE *Varies by Model.

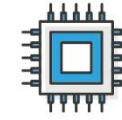
- Front □ CAMERA ■ USB OTG ■ USB HOST ■ AUTO BRIGHTNESS SENSOR □ IrDA SENSOR ■ PROXIMITY SENSOR
 Rear ■ SERIAL 3 PORTS ■ ETHERNET 2 CHANNEL ■ 3.0 USB HOST 2 PORTS □ SD CARD ■ OPTION MODULE(CAM32)



TOPRT40

PREMIUM HMI

FEATURES



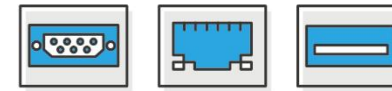
Enhanced CPU

Supports Twice the Speed Compared to the TOPRT1210SD-Ex Model



Aluminum Frame

An Aluminum Frame Featuring Robust Durability and a Premium Design



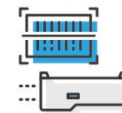
Serial / Ethernet / USB Interfaces

Provides 3 Serial Ports: COM1 / COM2 / COM3
 Supports Dual-Channel Ethernet Networks with Different IPs
 Front 2.0 USB OTG and HOST Ports Available
 Rear 3.0 USB HOST Ports x 2



T6 Temperature Class Explosion-Proof Certification

Certified for Explosion-Proof Standards: KCs (Korea), ATEX (Europe), IECEx (International), Hazloc (North America)



Built-In IrDA (Infrared) Sensor (Optional)

Wireless Communication with Our Barcode Scanner
 Automatic Recognition Within 0.5 Meters



Built-In Front Camera (Optional)

Adjustable Wide-Angle Camera Included



Proximity Sensor / Auto-Brightness Sensor

Built-In Proximity Sensor That Can Switch Modes Based on Working Distance
 Built-In Auto-Brightness Sensor to Adjust Screen Brightness

Optional Camera, SD Card, IrDA Sensor

Model	Camera	SD Card	IrDA Sensor
Blank	○	X	○
01	X	X	○
02	○	○	○
TOPRT1540(-Ex)	03	X	○
TOPRT1240(-Ex)	04	○	X
TOPRT1040(-Ex)	05	X	X
	06	○	X
	07	X	X

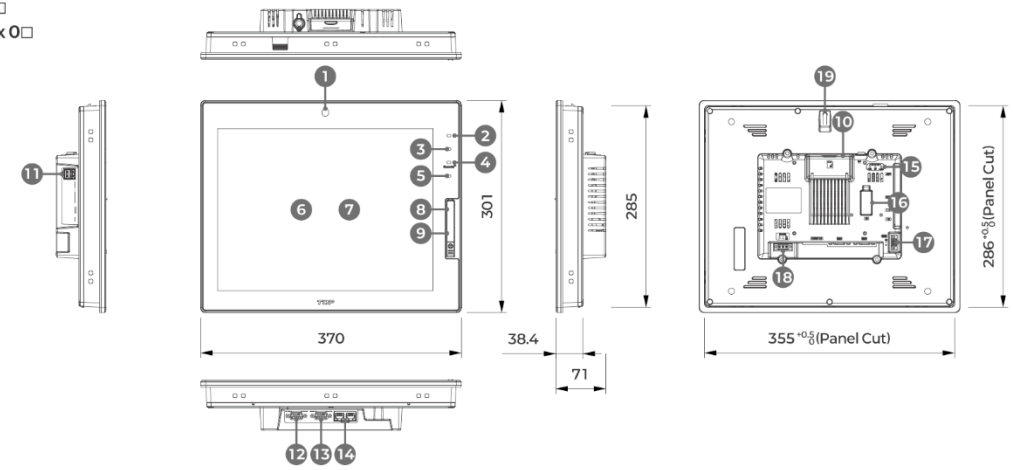
TOPRT40 SPECIFICATIONS

Non-Ex Model Ex Model	TOPRT1540XD 0□ TOPRT1540XD-Ex 0□	TOPRT1240XD 0□ TOPRT1240XD-Ex 0□	TOPRT1040SD 0□ TOPRT1040SD-Ex 0□	
Display	Display Type	15" TFT Color	12.1" TFT Color	10.4" TFT Color
	Color		16M Colors	
	Display Area(mm)	304.1 x 228.1	246 x 184.5	211.2 x 158.4
	Resolution(dot)	1024 x 768		800 x 600
	Brightness Level		10 Levels(by Software)	
	Backlight Type		LED	
Touch	Backlight Life		50,000 hours	
	Touch Type		Analog Resistive Film	
	Resolution(Cell)	1024 x 768		800 x 600
Serial COM1	RS-232C, RS-422/485 Asynchronous +5Vdc PWR Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: DSUB 9Pin x 1			
	RS-232C, RS-422/485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: DSUB 9Pin x 1			
	RS-485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
Serial COM2	RS-232C, RS-422/485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: DSUB 9Pin x 1			
	RS-232C, RS-422/485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
	RS-485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
Serial COM3	RS-485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
	RS-485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
	RS-485 Asynchronous Data Bit: 7/8 Bits, Stop Bit: 1/2 Bits, Parity Bit: None/Odd/Even Baud Rate: 2400 ~ 115.2kbps Connector: 3.5mm 3Pin x 1			
Interface	Ethernet	IEEE802.3i/IEEE802.3u/IEEE802.3ab, 10BASE-T/100BASE-TX/1000BASE-T Connector: RJ-45 x 2		
	USB Host	USB 3.0 compatible, Output 5Vdc/0.5A, USB 2.0 compatible, Output 5Vdc/0.5A Support: USB storage, USB barcode scanner(Standard keyboard protocol) Connector: USB Type A x 3(Rear(USB 3.0) x 2, Front(USB 2.0) x 1)		
	USB OTG	USB 2.0 Compatible, Output 5Vdc/0.5A, Max. 3m Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Mini-B(Front) x 1		
*IrDA	Compliant to IrDA physical layer standard up to 115.2 kbit/s (SIR), Range up to 0.7M in open space *Dedicated use of MX On HMI Equipment			
*SD Card	SD Card Slot x 1, SDHC(Max. 32GB)			
Option Modules	CAM32			
*Front Camera	USB UVC Max. Resolution: 640 x 480, 4 Adjustable Angles: Up20°, 10°, 0°, Down10°		USB UVC Max. Resolution: 640 x 480	
Proximity Sensor	YES			
Illumination Sensor	YES			
Printer	Roll Printer(EPSON protocol)			
Screen Memory	128MB			
Backup Memory	512KB: System Buffer(10K Word), including Alarm/Logging/Recipe			
Backup Period	Permanent			
Real Time Clock	Built in			
Status LED	3 LEDs(Power, Operation, Link) Built in			
Input Voltage	20 ~ 28Vdc			
Power Consumption	25W	18W	15W	
Voltage Sag	24Vdc, Within 10ms			
Insulation Resistance	500Vdc, 10MΩ			
Operation Temperature(°C)	-10 ~ +50			
Storage Temperature(°C)	-20 ~ +60			
Operation Humidity(%RH)	0 ~ 90(No Dew)			
Atmosphere	No Corrosive Gas			
Vibration Endurance	Amplitude: 10sF < 25Hz(2G) X, Y, Z each Direction(for 30 Minutes)			
Noise Immunity	1000Vp-p(Pulse Width 1μs)			
Electrostatic Discharge	Connective Discharge from EN61000-4-2: ±4kV			
Shock Endurance	10G X, Y, Z each Direction(for 3 Times)			
Ground Connection	Class 3(100Ω or Less)			
Protection Classification	IP54(Front)			
Certification	General Model: KC, CE, UL/cUL Explosion Proof Model: KC, CE, UL/cUL in Hazloc, KCs, CCC, IECEX, ATEX			
Panel Cut(mm)	355 x 286	306 x 247	260 x 202	
External Dimension(mm)	370 x 301 x 71	320 x 261 x 68	275 x 217 x 68	
Weight(kg)	5.2	3.6	2.7	
Cooling System	Natural Air Circulation			
Case Material	Aluminum			

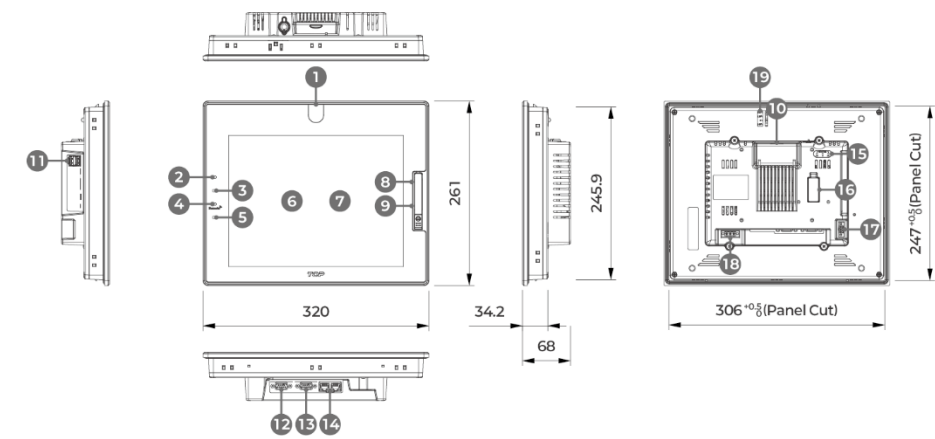
* Front Camera, SD Card, and IrDA Sensor Options Available.

DRAWING

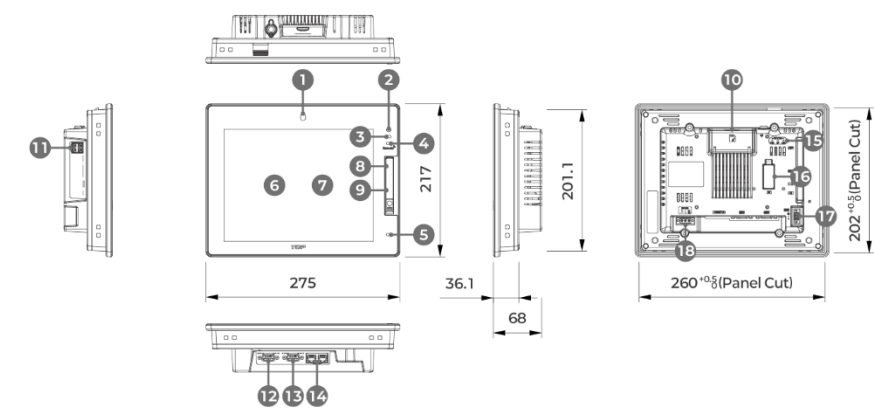
TOPRT1540XD 0□
TOPRT1540XD-Ex 0□



TOPRT1240XD 0□
TOPRT1240XD-Ex 0□



TOPRT1040SD 0□
TOPRT1040SD-Ex 0□



- 1 Camera
- 2 Power LED
- 3 Illumination Sensor
- 4 IrDA Sensor
- 5 Proximity Sensor
- 6 LCD Panel
- 7 Touch Panel
- 8 USB OTG
- 9 USB Host
- 10 SD Card Slot
- 11 USB Host 2P
- 12 Serial COM2
- 13 Serial COM1
- 14 Ethernet 2Ch
- 15 Status LED
- 16 Expansion Module Connector
- 17 Serial COM3
- 18 Power Input
- 19 Camera Angle Adjustment Lever

TOPRT WIDE SERIES

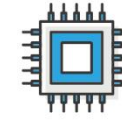
Ex / Non-Ex Premium Wide HMI

INTERFACE

- Front ■ USB OTG ■ USB HOST ■ CAMERA ■ PROXIMITY SENSOR ■ IrDA SENSOR
 Rear ■ SERIAL 3 PORTS ■ ETHERNET 2 CHANNEL ■ 3.0 USB HOST 2 PORTS □ Wi-Fi □ Bluetooth
 ■ HDMI ■ AUDIO ■ SD CARD ■ OPTION MODULE(CAM32)

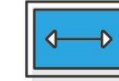


FEATURES



Enhanced CPU

Supports Twice the Speed Compared to the TOPRT1210SD-Ex Model



Equipped with a Clear Capacitive Touch Sensor

16:9 Wide 1366 x 768 High-Resolution Display
 IK07-Rated Tempered Glass for Enhanced Impact Resistance



Front Aluminum Frame

Front Aluminum Frame with Robust Durability Sleek Design with Minimal Bezel



T6 Temperature Rating Explosion-Proof Certification

Safety Ensured with ATEX, IECEx, and Hazloc Explosion-Proof Certifications



IrDA (Infrared) Sensor / Bluetooth

Supports Wireless Communication with Our Barcode Scanners via IrDA / Bluetooth



Front Camera Built-In

Built-In Wide-Angle Camera with Adjustable Angle



Serial / Ethernet / USB Interfaces

Provides 3 Serial Ports: COM1 / COM2 / COM3
 Supports Dual-Channel Ethernet Networks with Different IPs
 Front 2.0 USB OTG and HOST Ports Available
 Rear 3.0 USB HOST Ports x 2

Wi-Fi and Bluetooth Options Available

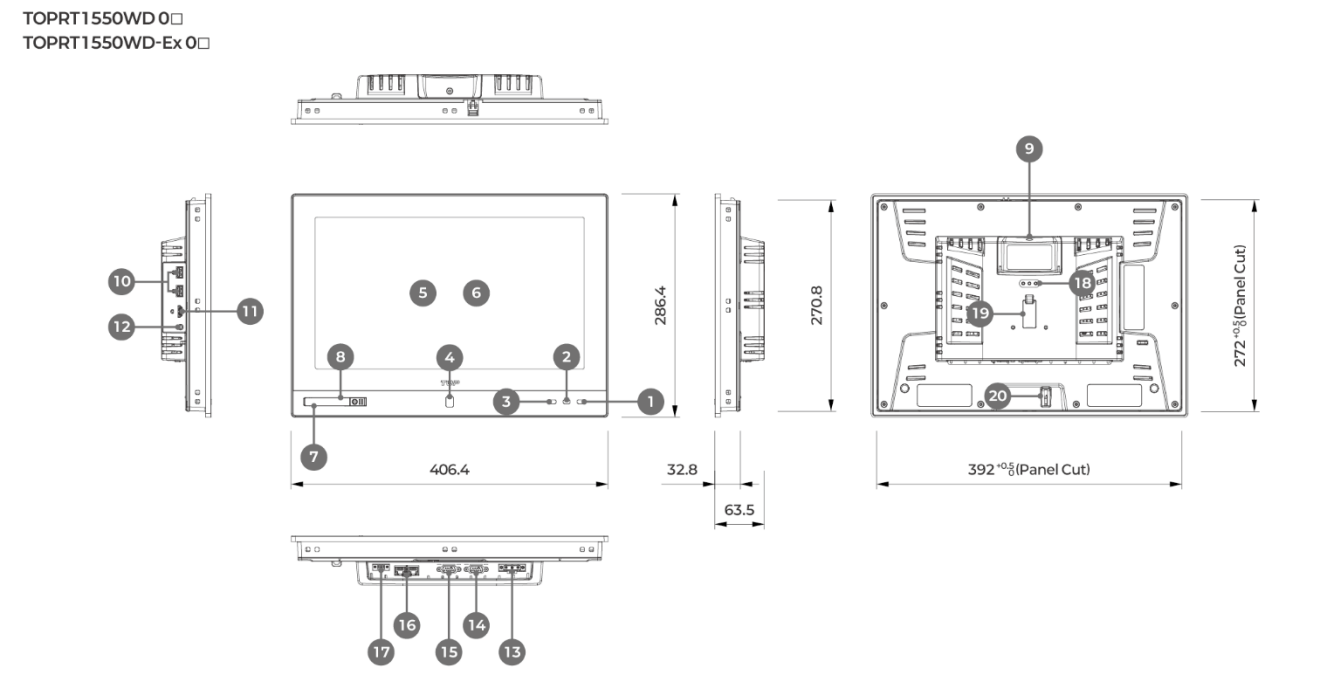
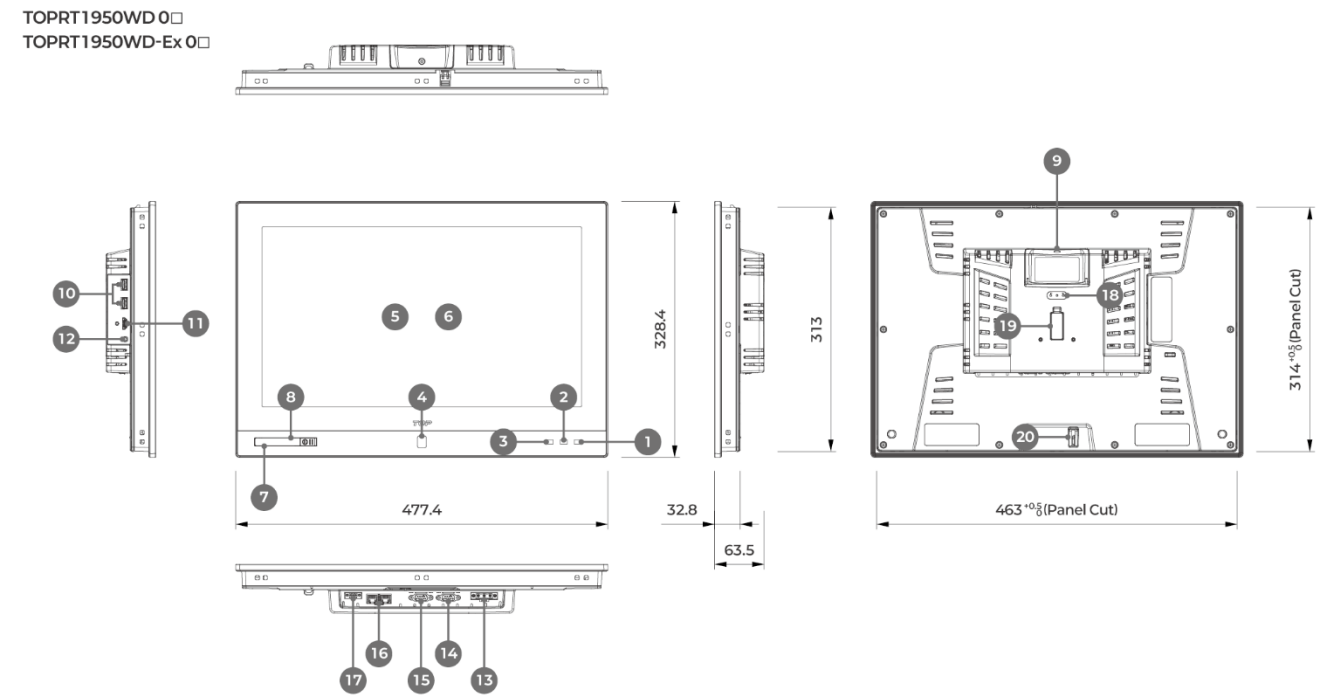
Model	Wi-Fi	Bluetooth
Blank	○	○
TOPRT1950WD(-Ex) TOPRT1550WD(-Ex)	○	○
01	x	x

TOPRT WIDE SPECIFICATIONS

Non-Ex Model Ex Model	TOPRT1950WD 0□ TOPRT1950WD-Ex 0□	TOPRT1550WD 0□ TOPRT1550WD-Ex 0□	
Display	Display Type	18.5" TFT Color	15.6" TFT Color
	Color		16M Colors
	Display Area(mm)	409.8 x 230.4	344.2 x 193.5
	Resolution(dot)		1366 x 768
	Brightness Level		10 Levels(by software)
Touch	Backlight Type		LED
	Backlight Life		50,000 hours
	Touch Type		Capacitive
Serial COM1	RS-232C, RS-422/485 Asynchronous +5Vdc PWR Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400 ~ 115.2kbps Internal termination resistors(Software set-up) Connector: DSUB 9pin x 1		
	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400 ~ 115.2kbps Internal termination resistors(Software set-up) Connector: DSUB 9pin x 1		
	RS-485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400 ~ 115.2kbps Internal termination resistors(Software set-up) Connector: 3.5mm 3pin x 1		
Serial COM2	IEEE 802.3i, IEEE 802.3u, IEEE 802.ab, 10Base-T/100Base-TX/1000Base-T Connector: RJ-45 x 2		
	USB 3.0 compatible, Output 5Vdc/0.9A, USB 2.0 compatible, Output 5Vdc/0.5A Support: USB storage, USB barcode scanner(Standard keyboard protocol) Connector: USB Type A x 3(Rear(USB 3.0) x 2, Front(USB 2.0) x 1)		
	USB 2.0 compatible, Output 5Vdc/0.5A, Max 3m Support: USB storage, USB barcode scanner(Standard keyboard protocol) Connector: USB mini-B(front) x 1		
Interface	2.4G: 2.400GHz ~ 2.483GHz 5G: 5.150GHz ~ 5.725GHz WLAN standard: IEEE 802.11a/b/g/n Operation range up to 20 meters in open space Security: WEP(64/128), WPA-PSK+(TKIP, AES), WPA2-PSK+(TKIP, AES)		
	2402MHz ~ 2480MHz, Bluetooth® 5.0(BLE), Range up to 5M in open space		
	Compliant to IrDA physical layer standard up to 115.2 kbit/s(SIR), Range up to 0.7M in open space *Dedicated use of MX On HMI equipment.		
Memory & Others	SD card slot x 1, SDHC(Max. 32GB), SDXC(Max. 1TB)		
	CAM32		
	3.5mm Audio jack output		
Power	HDMI v2.0, Max. 1366 x 768		
	USB UVC Max. resolution: 640 x 480 5 Adjustable angles: Up 20°, 10°, 0°, Down 10°, 20°		
	YES		
Environment	Roll printer(EPSON protocol)		
	128MB		
	512KB: System buffer(10K Word), Including Alarm/Logging/Recipe		
Structure	Permanent		
	Built in		
	3 LEDs(Power, Operation, Link) built in		
Power	24Vdc(20 ~ 28Vdc)		
	40W		
	24Vdc, Within 10ms		
Environment	500Vdc, 10MΩ		
	-10 ~ +50		
	-20 ~ +60		
Environment	0 ~ 90(No dew)		
	No corrosive gas		
	Amplitude: 10sF < 25Hz(2G) X, Y, Z each direction(for 30 minutes)		
Environment	1000Vp-p(Pulse width 1μs)		
	Connective discharge from EN61000-4-2: ±4kV		
	10G X, Y, Z each direction(for 3 times)		
Environment	Class 3(100Ω or less)		
	IP54(front)		
	General Model: KC, CE, UL/cUL Explosion Proof Model: KC, CE, UL/cUL in Hazloc, KCs, IECEX, ATEX		
Structure	463 x 314		392 x 272
	477.4 x 328.4 x 63.5		406.4 x 286.4 x 63.5
	5.30		4.10
Structure	Natural air circulation		
	Aluminum + Plastic		

* Wi-Fi and Bluetooth Options Available.

DRAWING



- 1 Power LED
- 2 IrDA Sensor
- 3 Proximity Sensor
- 4 Camera
- 5 LCD Panel
- 6 Touch Panel
- 7 USB OTG
- 8 USB Host
- 9 SD Card Slot
- 10 USB Host 2P
- 11 HDMI
- 12 AUDIO
- 13 Power Input
- 14 Serial COM1
- 15 Serial COM2
- 16 Ethernet 2ch
- 17 Serial COM3
- 18 Status LED
- 19 Expansion Module Connector
- 20 Camera Angle Adjustment Lever

TOPRC WIDE SERIES

Ex / Non-Ex Standard Wide HMI

INTERFACE

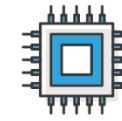
- Front ■ USB OTG ■ USB HOST ■ IrDA SENSOR
 Rear ■ SERIAL 3 PORTS ■ ETHERNET 2 CHANNEL ■ USB HOST 2 PORTS □ Wi-Fi □ Bluetooth ■ SD CARD



TOPRC WIDE

STANDARD WIDE HMI

FEATURES



Enhanced CPU

Supports Twice the Speed Compared to the TOPRT1210SD-Ex Model



Equipped with a Clear Capacitive Touch Sensor

16:9 Wide 1366 x 768 High-Resolution Display
 IK07-Rated Tempered Glass for Enhanced Impact Resistance



Rear Aluminum Frame

Rear Aluminum Frame with Robust Durability
 Sleek Design with Minimal Bezel



Serial / Ethernet / USB Interfaces

Provides COM1 / COM2 / COM3 Serial Ports
 Supports 2-Channel Ethernet Network with Different IPs
 Front USB OTG and HOST Port Provided
 Rear USB HOST – 2 Ports Provided



IrDA (Infrared) Sensor / Bluetooth

Supports Wireless Communication with Our Barcode Scanners via IrDA / Bluetooth

Wi-Fi and Bluetooth Options Available

Model	Wi-Fi	Bluetooth
TOPRC1900WD(-Ex)	Blank	o
TOPRC1500WD(-Ex)		
TOPRC1200WD(-Ex)	01	x

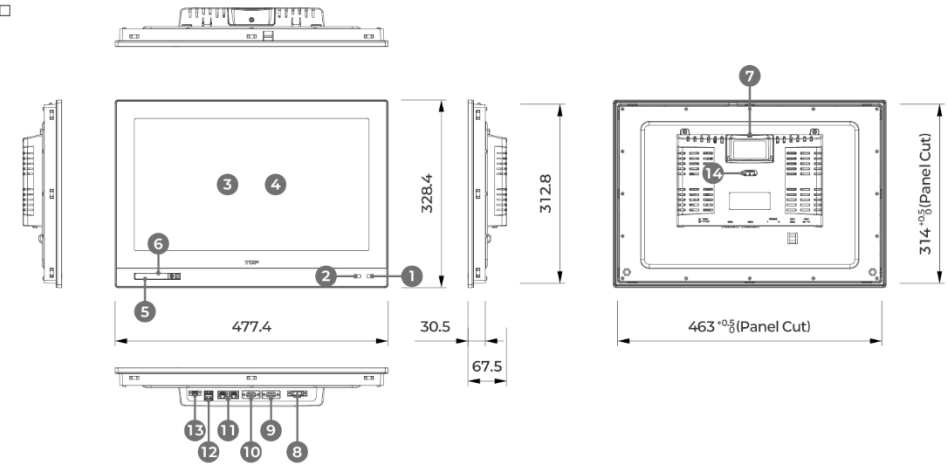
TOPRC WIDE SPECIFICATIONS

Non-Ex Model Ex Model	TOPRC1900WD 0□ TOPRC1900WD-Ex 0□	TOPRC1500WD 0□ TOPRC1500WD-Ex 0□	TOPRC1200WD 0□ TOPRC1200WD-Ex 0□	
Display	Display Type	18.5" TFT Color	15.6" TFT Color	12.1" TFT Color
	Color		16M Colors	
	Display Area(mm)	409.8 x 230.4	344.2 x 193.5	261.12 x 163.2
	Resolution(dot)		1366 x 768	1280 x 800
	Brightness Level		10 Levels(by software)	
	Backlight Type		LED	
Touch	Backlight Life		50,000 hour	
	Touch Type		Capacitive Touch	
Serial COM1	Resolution(Cell)		1366 x 768	1280 x 800
	Serial COM1	RS-232C, RS-422/485 Asynchronous +5Vdc PWR Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Internal termination resistors(Software set-up) Connector: DSUB 9pin x 1		
	Serial COM2	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Internal termination resistors(Software set-up) Connector: DSUB 9pin x 1		
Serial COM3	Serial COM3	RS-485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Internal termination resistors(Software set-up) Connector: 3.5mm 3pin x 1		
	Ethernet	IEEE802.3i/IEEE802.3u, 10Base-T/100Base-TX/1000Base-T Connector: RJ-45 x 2		
	USB Host	USB 2.0 Compatible, Output 5Vdc/0.5A Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Type A x 3(Rear x 2, Front x 1)		
Interface	USB OTG	USB 2.0 Compatible, Output 5Vdc/0.5A, Max 3m Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Mini-B(Front) x 1		
	*Wi-Fi	2.4G: 2.4000GHz ~ 2.4835GHz 5G: 5.150GHz ~ 5.725GHz WLAN Standard: IEEE 802.11a/b/g/n Operation Range Up to 20meters in open space Security: WEP(64/128), WPA-PSK+(TKIP, AES), WPA2-PSK+(TKIP, AES)		
	*Bluetooth	2402MHz ~ 2480MHz, Bluetooth® 5.0(BLE), Range up to 5M in open space		
IrDA	IrDA	Compliant to IrDA physical layer standard up to 115.2 kbit/s (SIR), Range up to 0.7M in open space *Dedicated use of MX On HMI equipment.		
	SD Card	SD Card Slot x 1, SDHC(Max. 32GB), SDXC(Max. 1TB)		
	Printer	Roll Printer(EPSON protocol)		
Memory & Others	Screen memory	128MB		
	Backup memory	512KB: System buffer(10K Word), Including Alarm/Logging/Recipe		
	Backup Period	Permanent		
	Real Time Clock	Built in		
Power	Status LED	3 LEDs(Power, Operation, Link) Built in		
	Input Voltage	24Vdc(20~28Vdc)		
	Power Consumption	40W		
Environment	Voltage Sag	24Vdc, Within 10ms		
	Insulation Resistance	500Vdc, 10MΩ		
	Operation Temperature(°C)	-10 ~ +50		
	Storage Temperature(°C)	-20 ~ +60		
	Operation Humidity(%RH)	0 ~ 90(No dew)		
	Atmosphere	No corrosive gas		
	Vibration Endurance	Amplitude: 10sF < 25Hz(2G) X, Y, Z each direction(for 30 minutes)		
	Noise Immunity	1000Vp-p(Pulse width 1μs)		
	Electrostatic Discharge	Connective discharge from EN61000-4-2: ±4kV		
	Shock Endurance	10G X, Y, Z each direction(for 3 times)		
Protection Classification	Ground Connection	Class 3(100Ω or less)		
	Protection Classification	IP65(Front)		
Certification	Certification	General Model: KC, CE, UL/cUL Explosion Proof Model: KC, CE, UL/cUL in Hazloc, KCs, CCC, IECEx, ATEX		
	Panel Cut(mm)	463 x 314	392 x 272	310 x 240
Structure	External Dimension(mm)	477.4 x 328.4 x 67.5	406.4 x 286.4 x 67.5	324.4 x 253.9 x 67.5
	Weight(kg)	4.2	3.12	2.3
	Cooling System		Natural air circulation	
Case Material		Aluminium + Plastic		

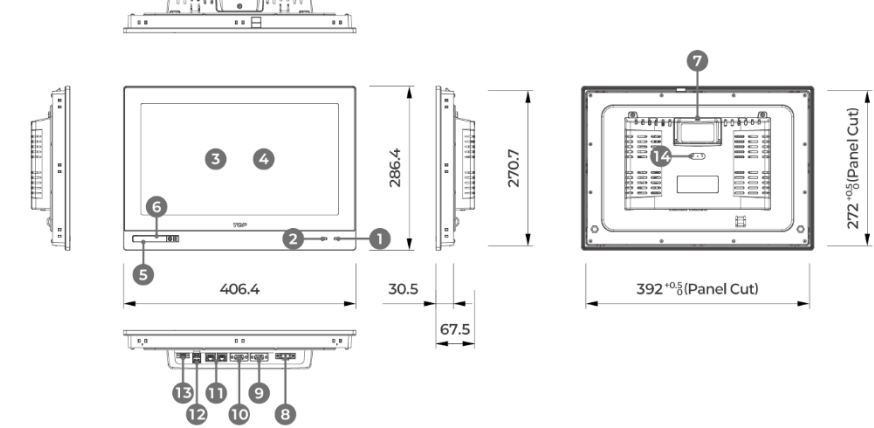
* Wi-Fi and Bluetooth Options Available.

DRAWING

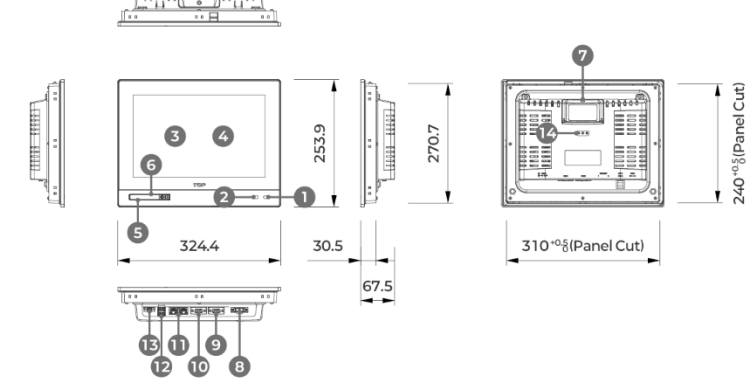
TOPRC1900WD 0□
TOPRC1900WD-Ex 0□



TOPRC1500WD 0□
TOPRC1500WD-Ex 0□



TOPRC1200WD 0□
TOPRC1200WD-Ex 0□



- 1 Power LED
- 2 IrDA Sensor
- 3 LCD Panel
- 4 Touch Panel
- 5 USB OTG
- 6 USB Host
- 7 SD Card Slot
- 8 Power Input
- 9 Serial COM1
- 10 Serial COM2
- 11 Ethernet 2Ch
- 12 USB Host 2P
- 13 Serial COM3
- 14 Status LED

TOPRW-IO SERIES

HMI with Integrated I/O

INTERFACE *Varies by Model.

▪ SERIAL 2 PORTS ▪ ETHERNET 1 CHANNEL ▪ USB HOST ▪ USB OTG ▪ SD CARD



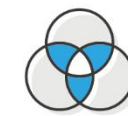
TOPRW IO

FEATURES



Flexible I/O Support

DIGITAL INPUT 16ch
 DIGITAL OUTPUT SINK 16ch
 * ANALOG INPUT (Voltage 2ch, Current 2ch)
 * ANALOG OUTPUT (Voltage 2ch, Current 2ch)
 * RTD 2ch
 (* For TOPRW0700WD-IO Model Only)



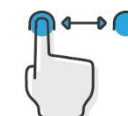
16M Full Color

Bright and Vivid Full-Color Display,
 Supporting Vector and 3D Libraries



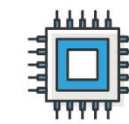
Front OTG USB Port

Supports Convenient Program Transfer in
 Transfer Mode and Allows Connection of USB
 Devices (Memory, Barcode Scanner, Camera,
 etc.) in HOST Mode



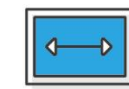
Touch Drag Function

Allows Drawing on the Screen to Leave
 Memos or Drag Down Top Menus Interactively



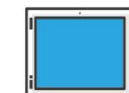
Quad Core CPU

Equipped with a Quad-Core CPU to Support
 High-Speed Processing



Supports 800 x 480 High Resolution

7" Wide Screen Ratio for a Larger Workspace



Sleek Integrated Body Design

Premium Integrated Body Offering Elegance
 and Lightweight Usability



Compatibility with XTOP WIDE Series

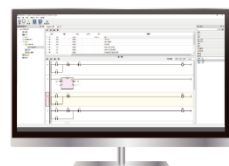
Provides the Same Panel Cut as Discontinued
 XTOP WIDE Models (7")
 Easily Replaces Existing XTOP WIDE Products

TOPRW-IO SPECIFICATIONS

Functional	TOPRW0700WD-IO	TOPRW0710WD-IO	
Display	Display Type	7" TFT Color	
	Color	16M Colors	
	Display Area(mm)	154 x 86	
	Resolution(dot)	800 x 480	
	Brightness Level	10 Levels(by software)	
	Backlight Type	LED	
Touch	Backlight Life	50,000 hours	
	Touch Type	Analog resistive film	
	Resolution(Cell)	800 x 480	
	Touch Life	1 million times or more	
Serial COM1	RS-232C Asynchronous +5Vdc PWR Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1		
	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1		
Serial COM2	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1		
	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX AUTO MDIX Connector: RJ-45 x 1		
Ethernet	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX AUTO MDIX Connector: RJ-45 x 1		
	USB 2.0 Compatible, Output 5Vdc/0.5A Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Type A x 1		
USB Host	USB 2.0 Compatible, Output 5Vdc/0.5A, Max 3m Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Mini-B(Front) x 1		
USB OTG	USB 2.0 Compatible, Output 5Vdc/0.5A, Max 3m Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Mini-B(Front) x 1		
SD Card	SD Card Slot x 1, SDHC(MAX 32GB)		
Printer	Roll Printer(EPSON protocol)		
IO	IO Function	Digital Input 16ch, Digital Output 16ch, Analog Input(Voltage 2ch, Current 2ch), Analog Output(Voltage 2ch, Current 2ch), RTD 2ch	
	IO Function	Digital Input 16ch, Digital Output 16ch	
Memory & Others	Screen Memory	128MB	
	Backup Memory	512KB: System buffer(10K Word), including Alarm/Logging/Recipe	
	Backup Period	Permanent	
	Real Time Clock	Built in	
	Status LED	3 LEDs(Power, Operation, Link) Built in	
	Input Voltage	24Vdc(20~28Vdc)	
Power	Power Consumption	15W	
	Voltage Sag	24Vdc, Within 10ms	
	Insulation Resistance	500Vdc, 10MΩ	
	Operation Temperature(°C)	-10 ~ +50	
Environment	Storage Temperature(°C)	-20 ~ +60	
	Operation Humidity(%RH)	0 ~ 90(No dew)	
	Atmosphere	No corrosive gas	
	Vibration Endurance	Amplitude: 10≤F<25Hz(2G) X,Y,Z each direction(for 30 minutes)	
	Noise Immunity	1000Vp-p(Pulse width 1μs)	
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV	
	Shock Endurance	10G X,Y,Z each direction(for 3 times)	
	Ground Connection	Class 3(100Ω under)	
	Protection Classification	IP65(Front)	
	Certification	KC, CE	
	Structure	Panel Cut(mm)	197 x 127
		External Dimension(mm)	212 x 145 x 62.5
Weight(kg)		0.81	
Cooling System		Natural air circulation	
Case Material	Plastic		

MuLiN Creator

- 01 Create Ladder Programs Based on IEC 61131-3 Standard
- 02 Transfer Programs to the TOPRW-IO Series to Execute Ladder Logic



Ethernet

TOPRW-IO

연결

Fan, Sensor
Motor, Lamp
Robot, Servo

Execute Ladder Programs

TOPRW-IO SPECIFICATIONS

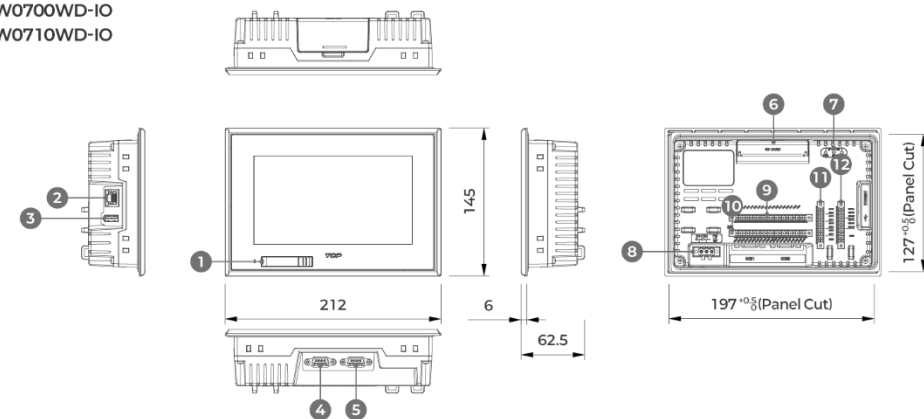
Functional	Digital Input	Digital Output
Type	Input/Output Type	16 channels Sink and Source Type
Power	Input/Output Voltage	24Vdc typ. On-State Min. 11.0Vdc ~ Max. 28.8Vdc, Off-State Max. 5Vdc
	System Power Dissipation	Max. 70mA
	Input Current in On State	Max. 6mA/Channel@28.8Vdc
	Output Current in On State	N/A
	Max. On-State Voltage Drop	N/A
	Off-State Leakage Current	N/A
Interface	Typ. Input Impedance	Typ. 4.7KΩ
	Input/Output Signal Delay	Off to On: Max. 0.1ms On to Off: Max. 0.5ms
	Input Filter(Digital)	0.5ms
	Isolation	I/O to Logic: Photocoupler isolation
Other	Field Power	Typ. 24Vdc(11.0Vdc ~ 28.8Vdc)
	Wiring	AWG 26 to 20
	Pin No.	Removable Terminal Block 20P

* Analog I/O Is Available on the TOPRW0700WD-IO Model.

Functional	Temperature Input(RTD)	Analog Input (AIV)	Analog Input (AIC)	Analog Output (AOV)	Analog Output (AOC)	
Type	Input/Output Type	2 Channels Analog RTD Type	2 Channels Analog Voltage Type	2 Channels Analog Current Type	2 Channels Analog Voltage Type	
Power	Sensor Type and Input/Output Range	PT100 * -200.0 to +850.0°C	0 ~ 5 Vdc	0 ~ 20mA	0 ~ 5 Vdc	
	System Power Dissipation	Max. 70mA@5.0Vdc			Max. 200mA	
	Field power	N/A			Max. 60mA@24Vdc	
	Typ. Input Impedance	N/A	Min. 500KΩ	Max. 250Ω	N/A	
Characteristic	Load		N/A		Min. 5KΩ	
	Data Format			16bits Integer		
	Resolution	0.0312°C/1bit	16bits, 0.076mV/1bit	16bits, 0.3uA/Bit	16bits, 0.076mV/1bit	16bits, 0.3uA/Bit
	Conversion Time	Approx. 70ms, All Channel@50Hz			4ms/All Channel	
	Module Error				±0.1% Full Scale@+25°C, ±0.3% Full Scale@0°C, +60°C	
	Isolation				Capacitive isolation	
Other	Common Type	2COM (1 Common/1 Channel)		2 COM(Single Common)		
	Wiring				AWG 26 to 20	
	Pin No.				Removable Terminal Block 10P(3.5mm pitch)	

DRAWING

TOPRW0700WD-IO
TOPRW0710WD-IO



- 1 USB OTG(Mini 5Pin B-Type)
- 2 Ethernet 1Ch
- 3 USB Host 1P
- 4 Serial COM2
- 5 Serial COM1
- 6 SD Card Slot
- 7 Status LED
- 8 Power Input
- 9 Digital Input Terminal
- 10 Digital Output Terminal
- 11 Analog I/O Terminal
- 12 RTD Input Terminal

TOPRP SERIES

Box Type HMI

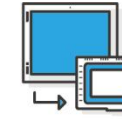
INTERFACE

▪ SERIAL 2 PORTS ▪ ETHERNET 2 PORTS ▪ USB HOST 2 PORTS ▪ USB OTG ▪ SD CARD ▪ HDMI OUT



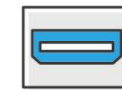
TOPRP

FEATURES



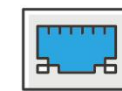
Compact Chassis Frame

Small Size Allows Easy Installation Even in Limited Spaces



HDMI Output

Conveniently Connect to Various Monitors via HDMI
Compatible with MX On Dedicated Touch Monitors (MDP)



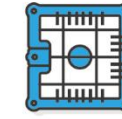
Provides 2 Ethernet Channels

Supports Heterogeneous Networks with Different IPs
Supports VNC (Remote Monitoring / Control) Function



Provides 2 USB Host Ports

Ports for Connecting External Devices Such as Mouse, Keyboard, USB Memory, and Barcode Scanners



Standard DIN Rail / VESA Mounting

Easily Installable Anywhere with Standard DIN Rail
Quickly Attachable to Monitors Using Standard VESA Bracket (* Optional)



Compatibility with TOP Products

Supports Fast Processing Speeds with Quad-Core CPU
Provides the Same Menus and Operation as TOP



Provides 2 Serial Ports

COM1 / COM2 with DSUB 9-Pin
Supports RS-232C and RS-422/485 Communication



OTG USB Port

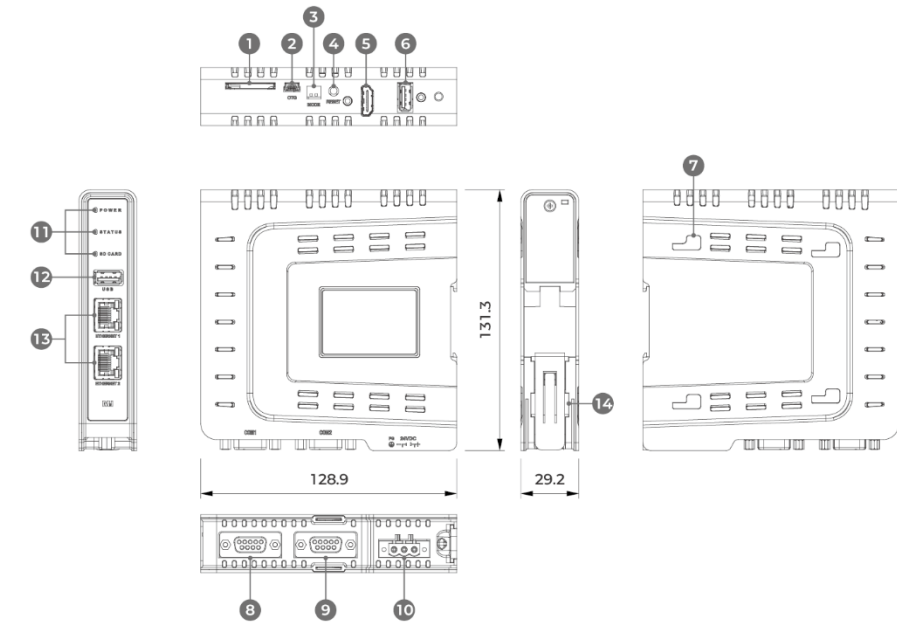
Supports Convenient Program Transfer in Transfer Mode and Allows Connection of USB Devices (Memory, Barcode Scanner, Camera, etc.) in HOST Mode

TOPRP SPECIFICATIONS

Functional	TOPRP1000D	
Serial COM1	RS-232C, RS-422/485 Asynchronous +5Vdc PWR Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1	
Serial COM2	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1	
Interface	Ethernet	IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX Connector: RJ-45 x 2
	USB Host	USB 2.0 Compatible, Output 5Vdc/0.5A Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Type A x 2
	USB OTG	USB 2.0 Compatible, Output 5Vdc/0.5A, Max 3m Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Mini-B x 1
	SD Card	SD Card Slot x 1, SDHC(MAX 32GB)
HDMI Output	HDMI v1.4, HDMI Output, Max. Resolution: 1280x720 at 60Hz Connector: HDMI x 1	
Printer	Roll Printer(EPSON protocol)	
Memory & Others	Screen Memory	128MB
	Backup Memory	512KB: System buffer(10K Word), including Alarm/Logging/Recipe
	Backup Period	Permanent
	Real Time Clock	Built in
	Status LED	3 LEDs(Power, Operation, SD Card) Built in
Power	Input Voltage	24Vdc(20~28Vdc)
	Power Consumption	10W
	Voltage Sag	24Vdc, Within 10ms
	Insulation Resistance	500Vdc, 10MΩ
Environment	Operation Temperature(°C)	-10 ~ +50
	Storage Temperature(°C)	-20 ~ +60
	Operation Humidity(%RH)	0 ~ 90(No dew)
	Atmosphere	No corrosive gas
	Vibration Endurance	Amplitude: 10≤F<25Hz(2G) X,Y,Z each direction(for 30 minutes)
	Noise Immunity	1000Vp-p(Pulse width 1μs)
	Electrostatic Discharge	Connective discharge from EN61000-4-2: ±4kV
	Shock Endurance	10G X,Y,Z each direction(for 3 times)
	Ground Connection	Class 3(100Ω or less)
	Protection Classification	IP20
Structure	Certification	KC, CE, UL/cUL
	External Dimension(mm)	128.9x131.2x29.2
	Weight(kg)	0.23
	Installation Method	Standard DIN Rail(35mm), VESA
	Cooling System	Natural air circulation
Case Material	Plastic	

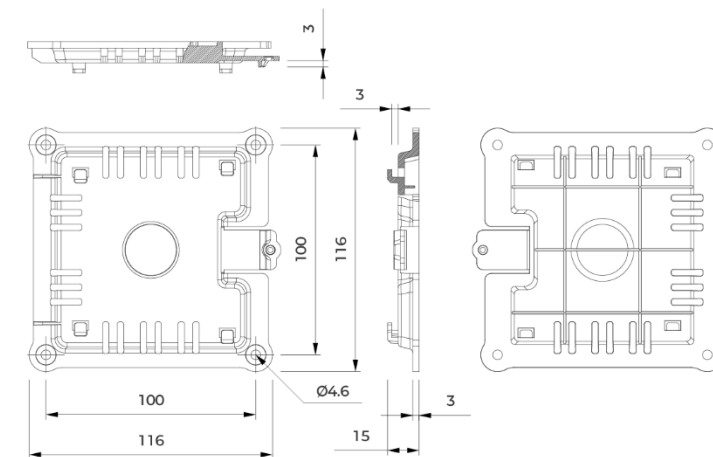
DRAWING

TOPRP1000D



- 1 SD Card Socket
- 4 Reset Switch
- 7 Vesa Bracket
- 10 Power Input
- 13 Ethernet Port
- 2 USB OTG
- 5 HDMI
- 8 Serial COM1
- 11 Status LED
- 14 DIN Rail
- 3 Mode Switch
- 6 USB Host #1
- 9 Serial COM2
- 12 USB Host #2

VESA Bracket(* Option)



TOPRN SERIES

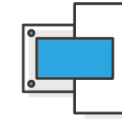
Open Frame HMI

INTERFACE *Varies by Model.

- SERIAL 3(2) PORTS
- ETHERNET 2(1) CHANNEL
- USB HOST
- USB DEVICE



FEATURES



Open Frame Design Allows Flexible External Design Implementation

Supports Clean Embedded Installation
 Without Exposed Frames Choice of Standard Mount or Flat Mount Options
 Mounting Holes Provided for Easy and Quick Assembly and Installation
 Supports Both Landscape and Portrait Screen Orientations



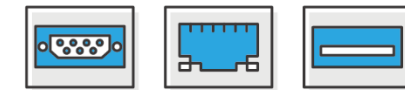
Provides Compact and Flexible Sizes

Slim Design Suitable for Confined Spaces
 Customizable Sizes Tailored to Industry-Specific Equipment Specifications



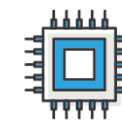
Flat Operation Surface for a Convenient User Environment

Maintains Cleanliness by Preventing Accumulation of Dust or Foreign Materials
 Front Sheet Attachment Ensures Water- and Dust-Resistance
 Stable Operation Even in Wet Environments



Optimized Interface Configuration

Provides Sufficient Connectivity and Scalability Even in Complex Industrial Environments
 Equipped with Serial Ports, Ethernet Channels, and USB



High-Performance Hardware Specifications

Equipped with a Quad-Core CPU for Fast Processing Speeds
 Supports 16M Full-Color Display and Vector Image Library
 Provides Intuitive UI Operation with Touch-Drag and Memo Functions



Largest Collection of Industrial Communication Protocols

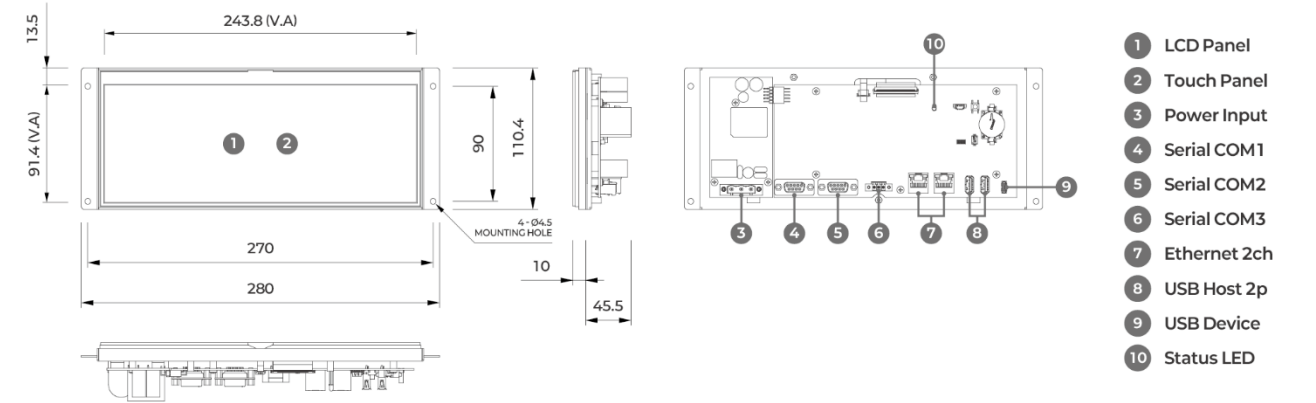
Provides Extensive Compatibility with Over 400 Controllers
 Supports Latest Industrial Networks Such as Modbus and EtherNet/IP

TOPRN SPECIFICATIONS

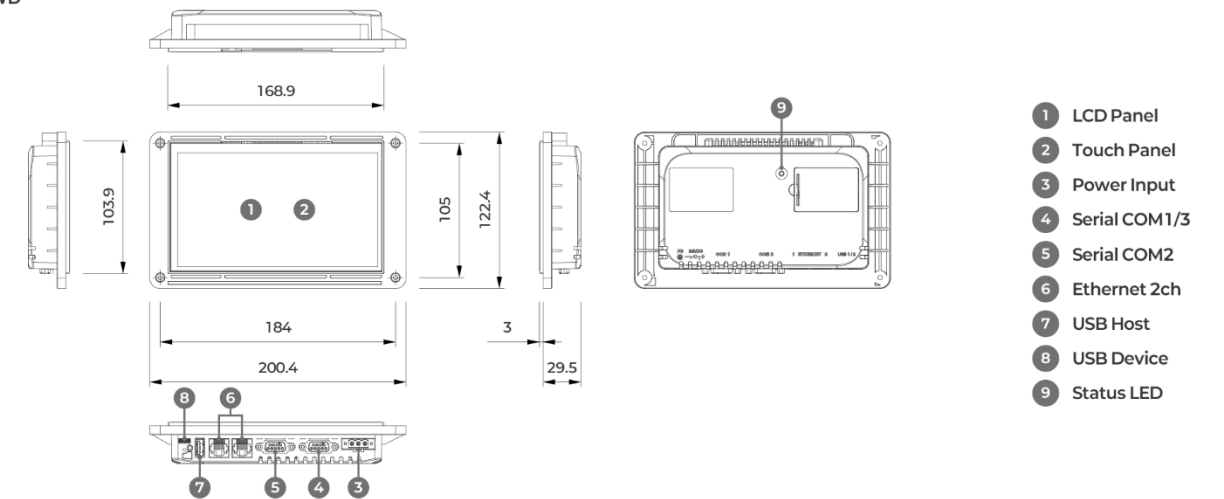
Functional	TOPRN1000UD	TOPRN0700WD	TOPRN0400WD	
Display	Display Type	10.25" TFT Color	7" TFT Color	4.3" TFT Color
	Color		16M Colors	
	Display Area(mm)	243.84 x 91.44	154.08 x 85.92	95.04 x 53.86
	Resolution(dot)	1280 x 480	800 x 480	480 x 272
	Brightness Level		10 Levels(by software)	
	Backlight Type		LED	
	Backlight Life		50,000 hours	
Touch	Touch Type		Analog resistive film	
	Resolution(Cell)	1280 x 480	800 x 480	480 x 272
	Touch Life		1 million times or more	
Serial COM1		RS-232C Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1	RS-232C Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: 12pin Connector	
	Serial COM2	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1	RS-232C, RS-422/485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: 12pin Connector	
	Serial COM3	RS-485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: 3.5mm 3pin x 1	RS-485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: DSUB 9pin x 1	RS-485 Asynchronous Data bit: 7/8 bits, Stop bit: 1/2 bits, Parity bit: None/Odd/Even Baud rate: 2400~115.2kbps Connector: 12pin Connector
Ethernet		IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX Connector: RJ-45 x 2		Connector: RJ-45 x 1
	USB Host	USB 2.0 Compatible, Output 5Vdc/0.5A Support: USB Storage, USB Barcode Scanner(Standard Keyboard Protocol) Connector: USB Type A x 2		
USB Device		USB 2.0 Compatible, Max 5m Connector: USB-C x 1		
	Printer	Roll printer(EPSON protocol)		
Memory & Others	Screen memory	128MB		
	Backup memory	512KB: System buffer(10K Word), including Alarm/Logging/Recipe		
	Backup Period	Permanent		
	Real Time Clock	Built in		
Power	Status LED	1 LED(Operation) Built in		
	Input Voltage	24Vdc(20 ~ 28Vdc)		
	Power Consumption	15W		
	Voltage Sag	24Vdc, Within 10ms		
Environment	Insulation Resistance	500Vdc, 10MΩ		
	Operation Temperature(°C)	-10 ~ +50		
	Storage Temperature(°C)	-20 ~ +60		
	Operation Humidity(%RH)	0 ~ 90(No dew)		
	Atmosphere	No corrosive gas		
	Vibration Endurance	Amplitude: 10≤F < 25Hz(2G) X, Y, Z each direction(for 30 minutes)		
	Noise Immunity	1000Vp-p(Pulse width 1μs)		
	Electrostatic Discharge	Connective discharge from EN61000-4-2: ±4kV		
	Shock Endurance	10G X, Y, Z each direction(for 3 times)		
	Ground Connection	Class 3(100Ω or less)		
Structure	Certification	KC, CE, UL/cUL		
	Panel Cut(mm)	TBD	155 x 87	97.5 x 56
	External Dimension(mm)	TBD	200.4 x 122.4 x 32.5	131 x 81 x 19.8
	Weight(kg)	TBD	0.5	0.3
	Cooling System	Natural air circulation		
Case Material	Plastic			

DRAWING

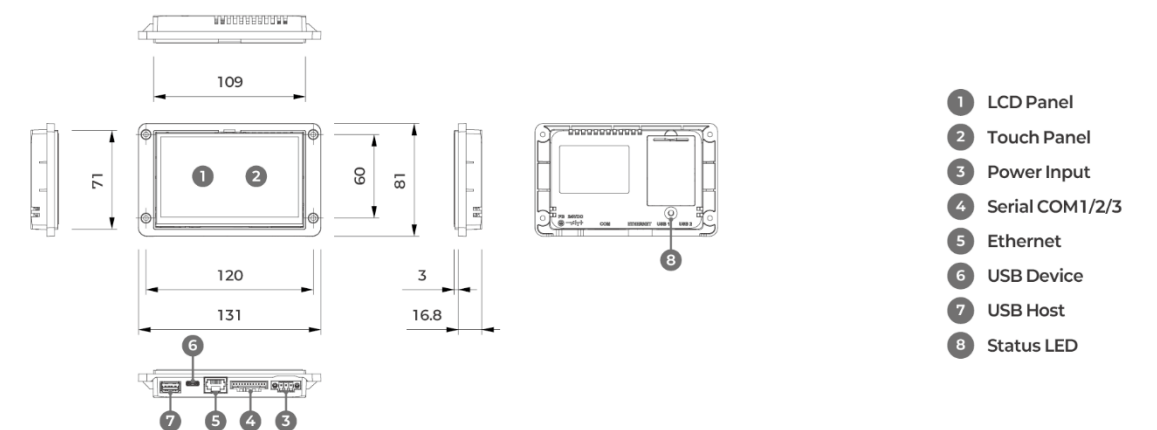
TOPRN1000UD



TOPRN0700WD



TOPRN0400WD



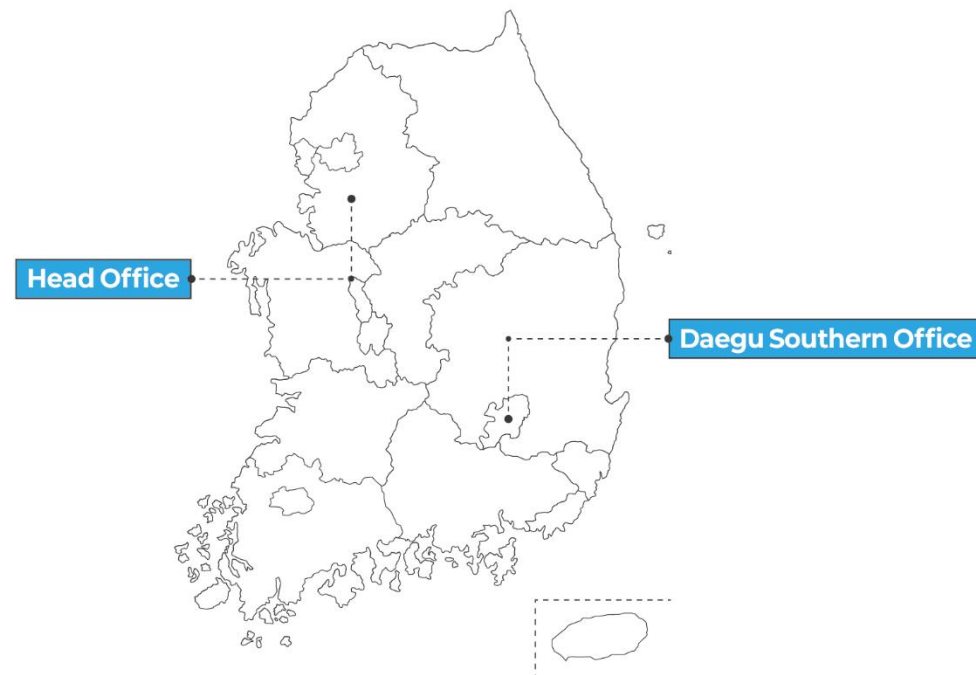
* Detailed Information on Panel Fabrication Can Be Found in the Hardware Manual.

GLOBAL BUSINESS NETWORK



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Commitment to Our Customers

Dialogue with Customers – Putting Customers First and Creating Value Together
Sustainable Growth – Achieving Reliability and Productivity Through Continuous R&D
Embracing New Changes – A Total Smart Factory Solution Platform Company Based on AX-DX