

Caution

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Contents in This Catalog Can Be Changed Without Any Notice.

TOP PRIME



TOP PRIME

Product Catalog

M2i Corporation

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V 1.0E 251225

M2I 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 PRIME

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TOP PRIME LINE-UP



TOP R Ex

15 12 10

Premium Series: Aluminum Modular Body with Multimedia Support

Ex / Non-Ex Premium HMI



TOP RW

10 7 5 4

Wide Series: Larger Display Featuring Only Essential Functions

Wide HMI



TOP Rx Ex

15 12 10 8 5

Standard Series: Optimized for Industrial Environments, Continuing the Legacy of XTOP

Ex / Non-Ex Standard HMI



TOP RH WIRED WIRELESS

7

Handy Type Wired/Wireless Series: Ergonomic and Sleek Design for Handheld Use

Handy Type 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

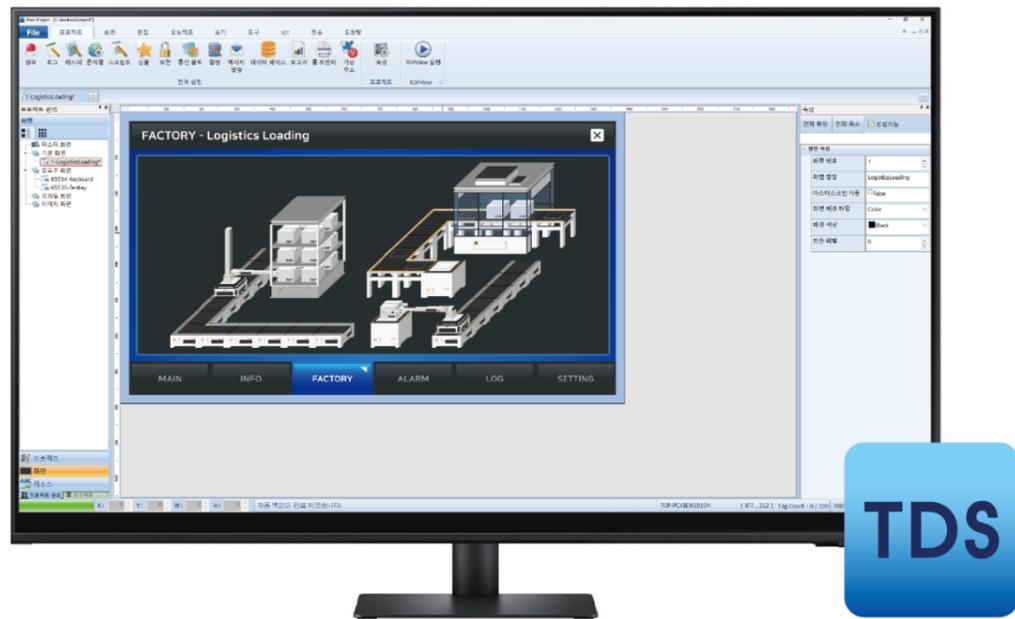
SMS & Email Dispatch

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 M2I Website (m2i.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.

TOPR SERIES

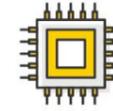
Ex / Non-Ex Premium HMI

INTERFACE *Varies by Model.

- SERIAL 3 PORTS
- ETHERNET 2 CHANNEL
- USB HOST 2 PORTS
- USB OTG
- SD CARD
- OPTION MODULE
- HDMI
- CAMERA
- AUDIO OUT
- VIDEO IN



FEATURES



Quad Core CPU

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



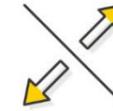
16M Full Color

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



Aluminum Frame

Durable Aluminum Body with a Premium Design



Efficient Modular Body

Combines Display Units of Various Sizes with Selectable Process Units According to Required Specifications



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



Serial 3 Ports / Ethernet 2 Channels

Provides COM1 / COM2 / COM3 Serial Ports and Supports Heterogeneous Networks with Different IP Addresses



T6 Temperature Class Explosion-Proof Certification

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



Multimedia Features (TOPR20 Model)

Equipped with Front Camera, Audio Output, Video Input, and HDMI Output

TOPR20 SPECIFICATIONS

DISPLAY UNIT

Functional	TOPRD1520X	TOPRD1220X	TOPRD1020S
Display	Display Type	15" TFT Color	12.1" TFT Color
	Color		16M Colors
	Display Area(mm)	304.1 x 228.1	246 x 184.5
	Resolution(dot)	1024 x 768	1024 x 768
	Brightness Level		10 Levels(by software)
	Backlight Type		LED
	Backlight Life		50,000 hours
Touch	Touch Type		Analog resistive film
	Resolution(Cell)	1024 x 768	800 x 600
	Touch Life		1 million times or more
Embedded Device	Front Camera		USB UVC Max. Resolution: 640 x 480
	Panel Cut(mm)	355 x 286	306 x 247
Structure	External Dimension(mm)	370 x 301 x 36.7	276 x 219.5 x 32.6
	Weight(kg)	3.58	2.44

PROCESS UNIT

Functional	TOPRP20D
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
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
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 Micro-B(Front) x 1
SD Card	SD Card Slot x 1, SDHC(MAX 32GB)
Option Modules	CAM32
HDMI Output	HDMI v1.4a, HDMI Output, Max. Resolution: 1920x1080 at 60Hz Connector: HDMI x 1
Video Input	Decodes NTSC, PAL or SECAM composite video, S-Video Connector: RCA socket x 1
Audio Output	Stereo output Connector: 3.5mm Audio socket x 1
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
External Dimension(mm)	201.6 x 147.6 x 37.3
Weight(kg)	0.82

TOPR10 SPECIFICATIONS

DISPLAY UNIT

Functional	TOPRD1510X	TOPRD1210S	TOPRD1010S
Display	Display Type	15" TFT Color	12.1" TFT Color
	Color		16M Colors
	Display Area(mm)	304.1 x 228.1	246 x 184.5
	Resolution(dot)	1024 x 768	800 x 600
	Brightness Level		10 Levels(by software)
	Backlight Type		LED
	Backlight Life		50,000 hours
Touch	Touch Type		Analog resistive film
	Resolution(Cell)	1024 x 768	800 x 600
Structure	Touch Life		1 million times or more
	Panel Cut(mm)	355 x 286	306 x 247
	External Dimension(mm)	370 x 301 x 36.7	276 x 219.5 x 32.6
	Weight(kg)	3.58	2.44

PROCESS UNIT

Functional	TOPRP10D
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
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
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 Micro-B(Front) x 1
SD Card	SD Card Slot x 1, SDHC(MAX 32GB)
Option Modules	CAM32
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
External Dimension(mm)	201.6 x 147.6 x 37.3
Weight(kg)	0.82

COMBINED DISPLAY + PROCESS UNIT SPECIFICATIONS (Common)

Functional	15"	12"	10"
Power	Input Voltage	24Vdc(20~28Vdc)	15W
	Power Consumption	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)
Environment	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)
	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 or less)
	Protection Classification		IP65(Front)
Structure	Certification		KC, CE, UL/cUL
	Weight(kg)	4.4	3.26
	Cooling System		Natural air circulation
	Case Material		AL(Aluminum)

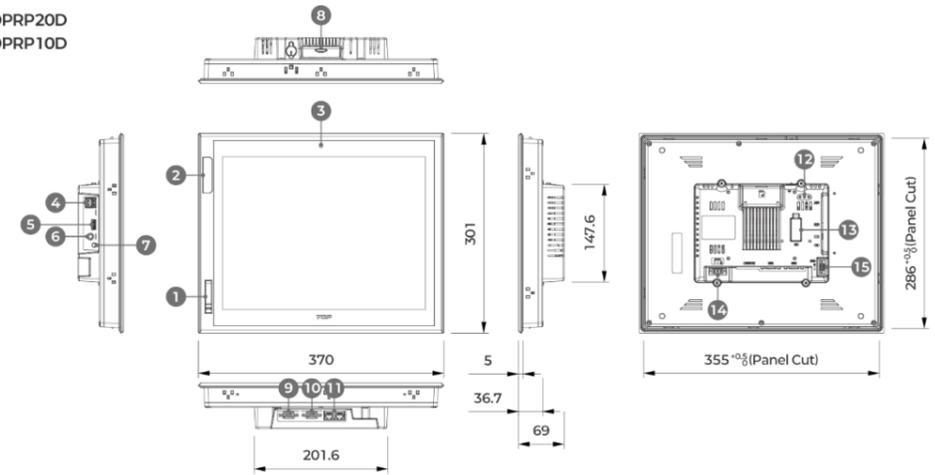
TOPR Ex SPECIFICATIONS

Ex Model

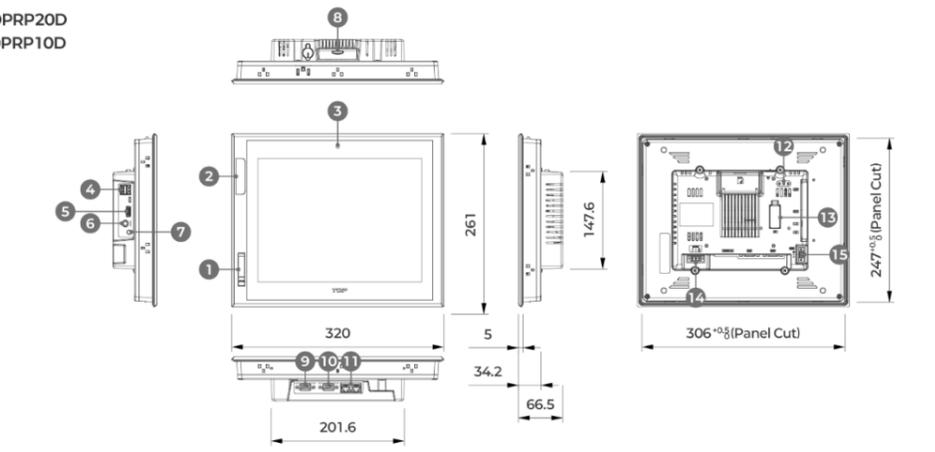
Functional	TOPRT1210SD-Ex	
Display	Display Type	12.1" TFT Color
	Color	16M Colors
	Display Area(mm)	246x184.5
	Resolution(dot)	1024x768
	Brightness Level	10 Levels(by software)
	Backlight Type	LED
	Backlight Life	50,000 hours
Touch	Touch Type	Analog resistive film
	Resolution(Cell)	1024x768
	Touch Life	1 million times or more
Embedded Device	Front Camera	USB UVC Max. resolution: 640x480, 4 Adjustable angles: Up 20°, 10°, 0°, Down 10°
	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
Interface	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
	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 Connection: 3.5mm 3pin x 1
Memory & Others	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 Micro-B(Front) x 1
	SD Card	SD Card Slot x 1, SDHC(Max. 32GB)
	Option Modules	CAM32
	Printer	Roll Printer(EPSON protocol)
	Screen Memory	128MB
Power	Backup Memory	512KB: System Buffer(10K Word), Including Alarm/Logging/Recipe
	Backup Period	Permanent
	Real Time Clock	Built in
Environment	Status LED	3 LEDs(Power, Operation, Link) Built in
	Input Voltage	24Vdc(20~28Vdc)
	Power Consumption	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: 10≤F < 25Hz(2G) X,Y,Z each direction(for 30 minutes)
Structure	Noise Immunity	1000Vp-p(Pulse width 1μs)
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV
Structure	Shock Endurance	10G X,Y,Z each direction(for 3 times)
	Ground Connection	Class 3(100Ω or less)
Structure	Protection Classification	IP65(Front) for KC, CE, UL/cUL in Hazloc, IP54(Front) for CCC, IP4X(Front) for KCs
	Certification	KC, CE, UL/cUL in Hazloc, KCs, CCC, IECEx, ATEX
Structure	Panel Cut(mm)	306x247
	External Dimension(mm)	320x261x34.2
	Weight(kg)	3.26
	Cooling System	Natural air circulation
	Case Material	AL(Aluminum)

DRAWING

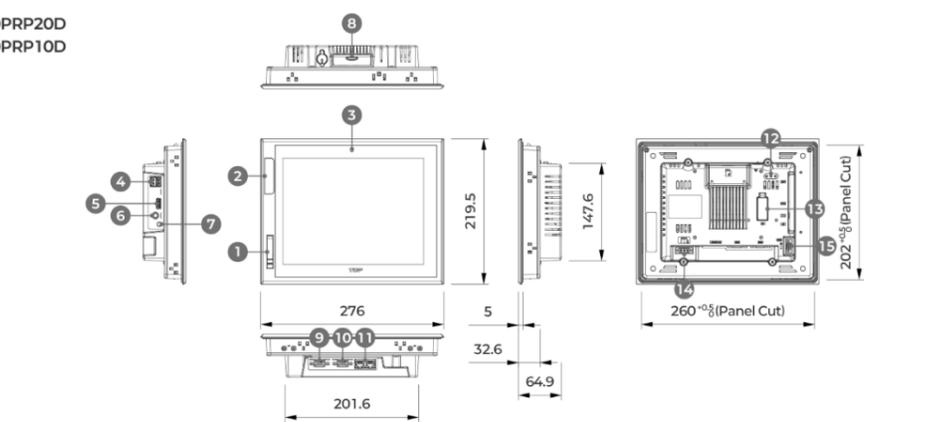
TOPRD1520X + TOPRP20D
TOPRD1510X + TOPRP10D



TOPRD1220X + TOPRP20D
TOPRD1210S + TOPRP10D
TOPRT1210SD-Ex



TOPRD1020S + TOPRP20D
TOPRD1010S + TOPRP10D



- 1 USB OTG(Micro 5Pin B-Type)
- 2 Power LED
- 3 Camera
- 4 USB Host 2P
- 5 HDMI Output
- 6 Video Input
- 7 Audio Output
- 8 SD Card Slot
- 9 Serial COM2
- 10 Serial COM1
- 11 Ethernet 2Ch
- 12 Status LED
- 13 Expansion Module Connector
- 14 Power Input
- 15 Serial COM3

TOPRX SERIES

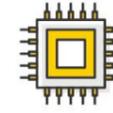
Ex / Non-Ex Standard HMI

INTERFACE *Varies by Model.

- SERIAL 3(2) PORTS
- ETHERNET 2(1) CHANNEL
- USB HOST
- USB OTG
- SD CARD(OPTION)



FEATURES



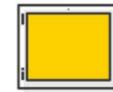
Quad Core CPU

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



16M Full Color

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



Sleek Integrated Body Design

Premium Integrated Body Offering Elegance and Lightweight Usability



XTOP Series Compatibility

Provides the Same Panel Cut as Discontinued XTOP Models
Can Easily Replace Existing XTOP Products



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



Serial 3 Ports / Ethernet 2 Channels

Provides COM1 / COM2 / COM3 Serial Ports and Supports Heterogeneous Networks with Different IP Addresses (Models 10" and Above)



T6 Temperature Class Explosion-Proof Certification

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



Touch Drag Function

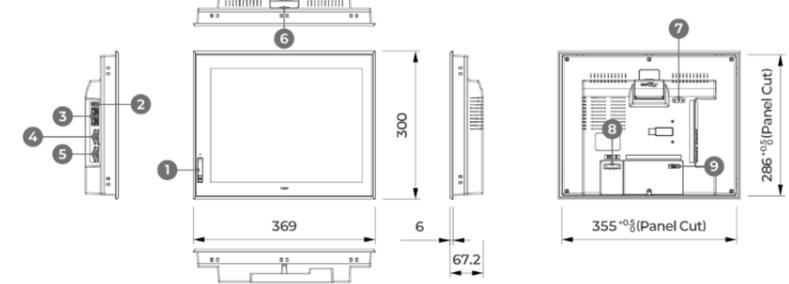
Allows Drawing on the Screen to Leave Memos or Drag Down Top Menus Interactively

TOPRX SPECIFICATIONS

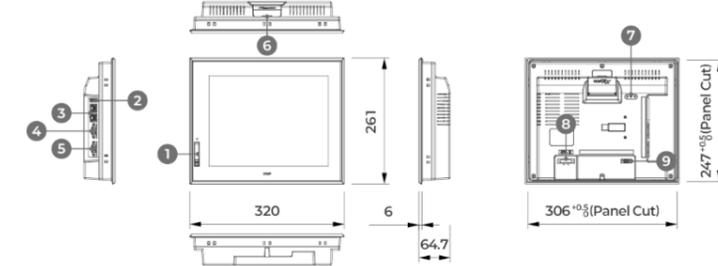
	Non Ex Model	TOPRX 1500XD	TOPRX 1200XD	TOPRX 1200SD	TOPRX 1000SD	TOPRX 1000VD	TOPRX 0800SD	TOPRX 0500VD	
	Ex Model	TOPRX 1500XD-Ex	TOPRX 1200XD-Ex	TOPRX 1200SD-Ex	TOPRX 1000SD-Ex	TOPRX 1000VD-Ex	TOPRX 0801SD	TOPRX 0501VD	
Display	Display Type	15" TFT Color	12.1" TFT Color	10.4" TFT Color		8.4" TFT Color		5.6" TFT Color	
	Color	16M Colors							
	Display Area(mm)	304.1 x 228.1	246 x 184.5	211.2 x 158.4		170.4 x 127.8	112.9 x 84.7		
	Resolution(dot)	1024 x 768	800 x 600		640 x 480	800 x 600	640 x 480		
	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		640 x 480	800 x 600	640 x 480		
	Touch Life	1 million times or more							
	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								
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				Not available				
Interface	Ethernet	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX Connector: RJ-45 x 2				IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX 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 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) TOPRX0801SD, TOPRX0501VD: SD Card not supported							
	Printer	Roll Printer(EPSON protocol)							
	Screen Memory	128MB							
Memory & Others	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							
Power	Input Voltage	24Vdc(20~28Vdc)							
	Power Consumption	18W	15W	15W, Ex model: 12W		12W			
	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)							
Environment	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)							
	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	General model: IP65(Front) Explosion proof model: IP54(Front) for CCC, IP4X(Front) for KCs							
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	222 x 168	158 x 126			
Structure	External Dimension(mm)	369 x 300 x 67.2	320 x 261 x 64.7	274 x 216 x 64.7	236 x 182 x 58.9	172 x 140 x 58			
	Weight(kg)	2.78	2.18	1.68	1.06	0.62			
	Cooling System	Natural air circulation							
	Case Material	PC(Resistance to flame)							

DRAWING

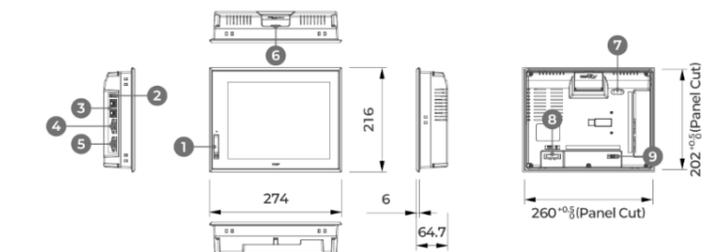
TOPRX1500XD
TOPRX1500XD-Ex



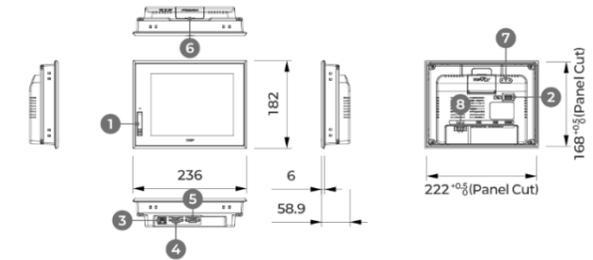
TOPRX1200XD
TOPRX1200SD
TOPRX1200XD-Ex
TOPRX1200SD-Ex



TOPRX1000SD
TOPRX1000VD
TOPRX1000SD-Ex
TOPRX1000VD-Ex



TOPRX0800SD
TOPRX0801SD



TOPRX0500VD
TOPRX0501VD



- 1 USB OTG(Mini 5Pin B-Type)
- 2 USB Host 1P
- 3 Ethernet
- 4 Serial COM2
- 5 Serial COM1
- 6 SD Card Slot(Optional)
- 7 Status LED
- 8 Power Input
- 9 Serial COM3

TOPRW SERIES

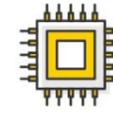
Wide HMI

INTERFACE *Varies by Model.

- SERIAL 2 PORTS
- ETHERNET 1 CHANNEL
- USB HOST
- USB OTG
- SD CARD(OPTION)



FEATURES



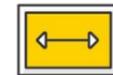
Quad Core CPU

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



16M Full Color

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



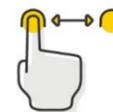
Supports 1024 x 600, 800 x 480 High Resolution

Wide Screen Ratios of 10", 7", and 5" Allow a Larger Workspace



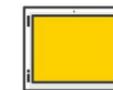
XTOP WIDE Series Compatibility

Compatible with XTOP WIDE Models (10", 7") Panel Cut
Can Easily Replace Existing XTOP WIDE Products



Touch Drag Function

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



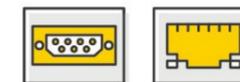
Sleek Integrated Body Design

Premium Integrated Body Offering Elegance and Lightweight Usability



OTG USB Port

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



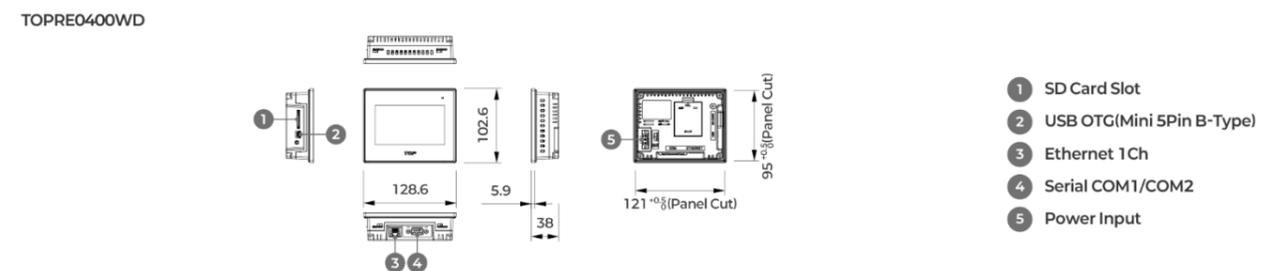
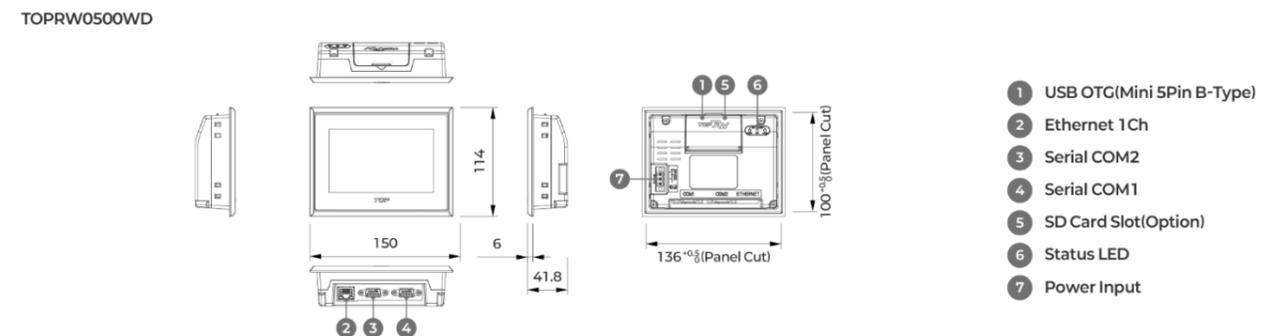
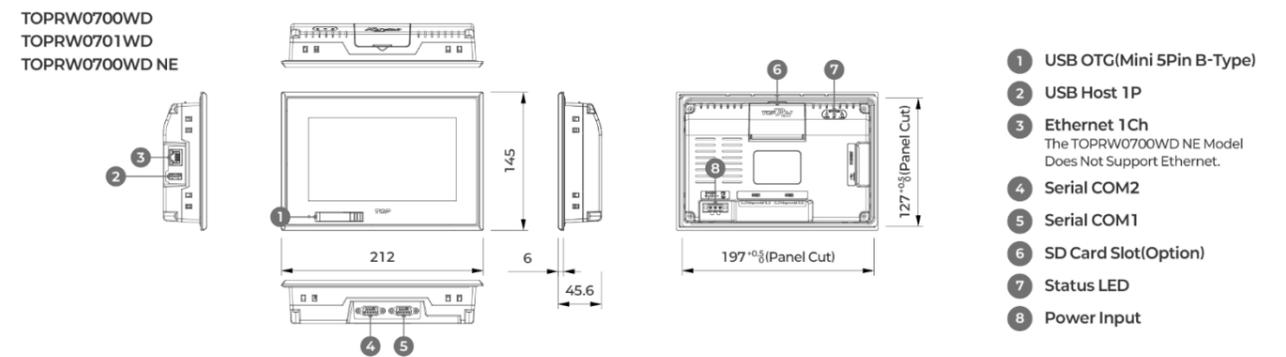
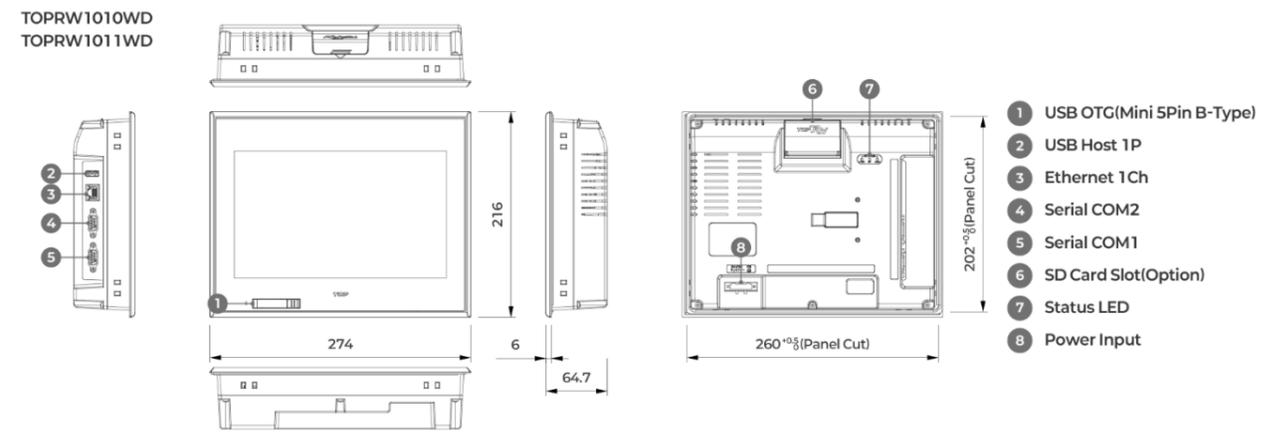
Serial 2 Ports / Ethernet 2 Channels

COM1 / COM2 Serial Ports
Supports Heterogeneous Networks with Different IPs (Models 10" and Above)

TOPRW SPECIFICATIONS

Functional	TOPRW1010WD TOPRW1011WD	TOPRW0700WD TOPRW0701WD	TOPRW0700WD NE	TOPRW0500WD	TOPRE0400WD
Display Type	10.1" TFT Color	7" TFT Color		5" TFT Color	4.3" TFT Color
Color			16M Colors		
Display Area(mm)	222.72 x 125.28	154 x 86		108 x 64.8	95.04 x 53.85
Resolution(dot)	1024 x 600		800 x 480		480 x 272
Brightness Level		10 Levels(by software)			
Backlight Type		LED			
Backlight Life		50,000 hours			
Touch Type		Analog resistive film			
Resolution(Cell)	1024 x 600		800 x 480		480 x 272
Touch Life		1 million times or more			
Serial COM1 (TOPRE: RS-232C Only)		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 (TOPRE: RS-422/485 Only)		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			
Ethernet	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX Connector: RJ-45 x 1		Not available	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX 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 1			Not available	
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		Connector: USB Mini-B(Rear) 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(Side) x 1	
SD Card		SD Card Slot x 1, SDHC(MAX 32GB) TOPRW1011WD, TOPRW0701WD: SD Card not supported			
Printer	Roll Printer(EPSON protocol)				
Screen Memory		128MB			64MB
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 Consumption	15W			12W	
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: 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, UL/cUL				
Panel Cut(mm)	260 x 202	197 x 127		136 x 100	121 x 95
External Dimension(mm)	274 x 216 x 64.7	212 x 145 x 45.6		150 x 114 x 41.8	128.6 x 102.6 x 38
Weight(kg)	1.7	0.72		0.4	0.28
Cooling System	Natural air circulation				
Case Material	PC(Resistance to flame)				

DRAWING



TOPRH SERIES

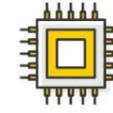
Handy Type Wired HMI

INTERFACE

- SERIAL 2 PORTS
- EHTERNET 1 CHANNEL
- USB HOST 2 PORTS
- USB OTG
- SD CARD



FEATURES



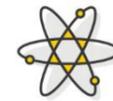
Quad Core CPU

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



16M Full Color

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



Sleek and Ergonomically Designed

Provides a Stable and Comfortable Grip for Handling with Hands and Arms



KEY Lock, Emergency, 3-Position Switch

Ensures Safety with Key Lock, Emergency Button, and 3-Position Switch



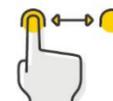
Function Keys and Touch Pen

Convenient Operation with 6 Function Keys, Including LED and a Touch Pen



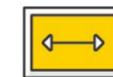
Shock-Resistant Bumper

Silicon Shock-Resistant Bumpers Mounted on All Sides for Safer Usage



Touch Drag Function

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



Supports 1024 x 600 High Resolution

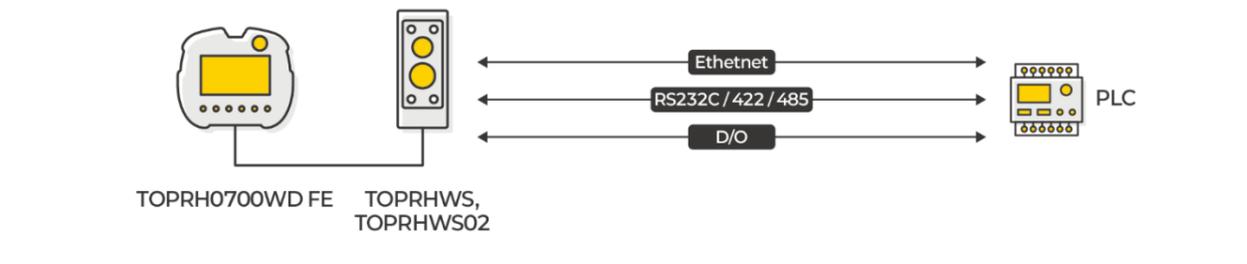
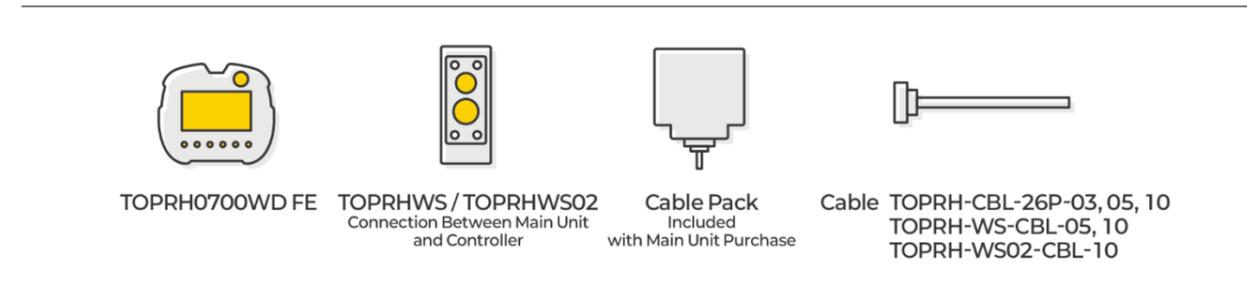
Wide Screen Ratio Allows for a Larger Workspace

TOPRH WIRED / TOPRHWS SPECIFICATIONS

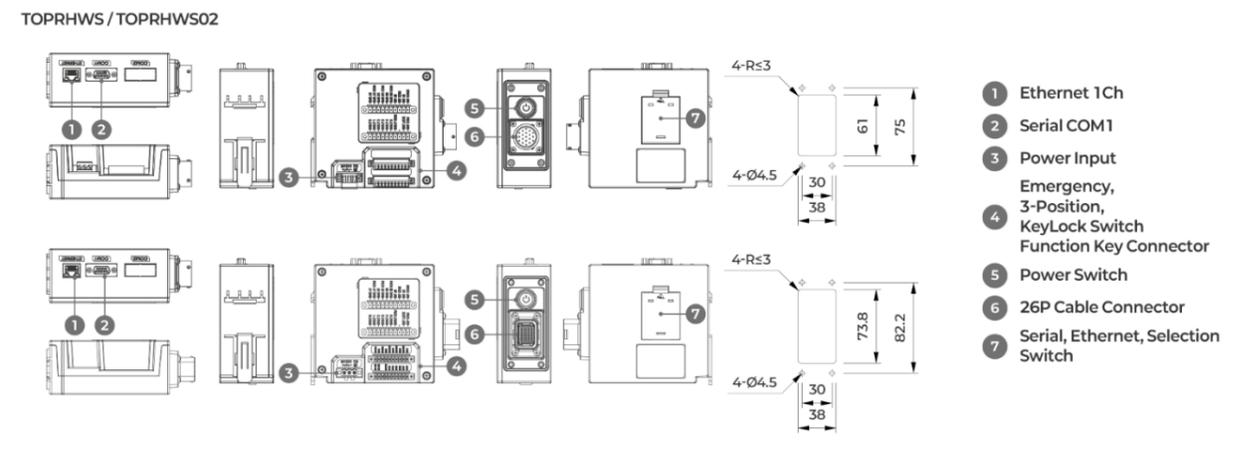
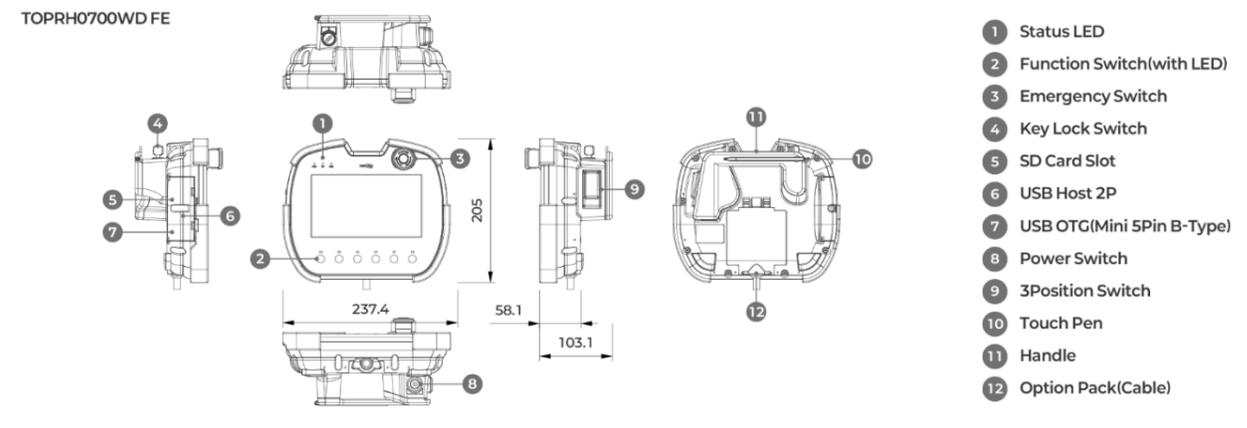
Functional	TOPRH0700WD FE	
Display	Display Type	7" TFT Color
	Color	16M Colors
	Display Area(mm)	154.21 x 85.92
	Resolution(dot)	1024 x 600
	Brightness Level	10 Levels(by software)
Touch	Backlight Type	LED
	Backlight Life	50,000 hours
	Touch Type	Analog resistive film
	Resolution(Cell)	1024 x 600
Interface	Serial COM1	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
	Ethernet	IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX
Memory & Others	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)
	Function Key	6Position with LED
	Printer	Roll Printer(EPSON protocol)
	Machanical Switchs	Emergency Switch 1A-2B, Keylock Switch 1A, 3Position enable Switch OFF-ON-OFF(2CH)
	Power Switch	Push-Lock power on-off switch built in
	Screen Memory	128MB
	Backup Memory	512KB: System buffer(10K Word), Including Alarm/Logging/Recipe
	Backup Period	Permanent
Power	Real Time Clock	Built in
	Status LED	3 LEDs(Power, Operation, Link) Built in
	Consumption	20W
	Voltage Sag	24Vdc, Within 10ms
	Insulation Resistance	500Vdc, 10MΩ
	Operation Temperature(°C)	-10 ~ +45
	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)
Environment	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	IP4X
	Certification	KC, CE, UL/cUL
	External Dimension(mm)	237 x 205 x 103
	Weight(kg)	1.1(Except Cable Pack)
	Cooling System	Natural air circulation
	Case Material	PC(Resistance to flame)

Functional	TOPRHWS	TOPRHWS02	
Interface	Serial COM1	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	
	Ethernet	IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX, Connector: RJ-45 x 1	
Power	Power Switch	Push-Push power on-off switch built in	
	26P Connector	To TOPRH, SRC6A21-26P	To TOPRH, 1981919-1 or 1981921-1
	Function Connector	Emergency Switch 1A-2B, Keylock Switch 1A, 3Position enable Switch OFF-ON-OFF(2CH), DOUT(6CH)	
	Input Voltage	24Vdc(20~28Vdc)	
	Power Consumption	20W	
	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)	
Environment	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)	
	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)	
	Certification	KC, CE, UL/cUL	
	External Dimension(mm)	145 x 119 x 54	148 x 119 x 54
	Weight(kg)	0.3	
	Cooling System	Natural air circulation	
Case Material	PC(Resistance to flame)		

PACKAGE CONTENTS



DRAWING



TOPRH SERIES

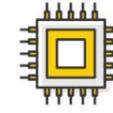
Handy Type Wireless HMI

INTERFACE

- Wi-Fi
- USB HOST 2 PORTS
- USB OTG
- SD CARD



FEATURES



Quad Core CPU

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



16M Full Color

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



Equipped with High-Performance Wireless Chip

Operable Wirelessly Up to 150m in Open Spaces



Sleek and Ergonomically Designed

Provides a Stable and Comfortable Grip for Handling with Hands and Arms



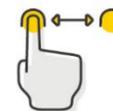
KEY Lock, 3-Position Switch, Function Keys, and Touch Pen

Convenient Operation with 6 Function Keys, Including LED and a Touch Pen



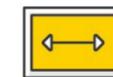
Shock-Resistant Bumper

Silicon Shock-Resistant Bumpers Mounted on All Sides for Safer Usage



Touch Drag Function

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



Supports 1024 x 600 High Resolution

Wide Screen Ratio Allows for a Larger Workspace

TOPRH WIRELESS / CRADLE SPECIFICATIONS

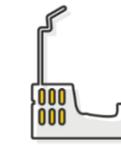
Functional	TOPRH0700WD-W	
Display	Display Type	7" TFT Color
	Color	16M Colors
	Display Area(mm)	154.21 x 85.92
	Resolution(dot)	1024 x 600
	Brightness Level	10 Levels(by software)
	Backlight Type	LED
Touch	Backlight Life	50,000 hours
	Touch Type	Analog resistive film
	Resolution(Cell)	1024 x 600
	Touch Life	1 million times or more
Wireless LAN	2.4G: 2.400GHz ~ 2.4835GHz 5G: 5.150GHz ~ 5.725GHz WLAN Standard: IEEE802.11 a/b/g/n Operation Range Up to 150meters in open space Security: WEP,TKIP,AES,WPA,WPA2	
Interface	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
Memory & Others	SD Card	SD Card Slot x 1, SDHC(MAX 32GB)
	Function Key	6Position with LED
	Machanical Switchs	Keylock Switch 1A, 3Position enable Switch OFF-ON-OFF(1CH)
	Power Switch	Push-Push power on-off switch built in
	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
	Battery	Rechargeable & Extractable Battery Pack 2S-2P Li-ion 4Cells 7.2Vdc 6800mAh Charging time 3 hours(Non-operating) Running time: 7 hours with wireless communication
Power	Consumption	20W(In Battery Pack)
	Operation Temperature(°C)	-10 ~ +45
	Storage Temperature(°C)	-20 ~ +60
	Operation Humidity(%RH)	0 ~ 90(No dew)
Environment	Atmosphere	No corrosive gas
	Vibration Endurance	Amplitude: 10sF<25Hz(2G) X,Y,Z each direction(for 30 minutes)
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV
	Shock Endurance	10G X,Y,Z each direction(for 3 times)
	Protection Classification	IP65
	Certification	KC, CE, UL/cUL
Structure	External Dimension(mm)	237 x 205 x 103
	Weight(kg)	1.32(Including Battery Pack)
	Cooling System	Natural air circulation
	Case Material	PC(Resistance to flame)

Functional	TOPRH-CRDL	
Power	Input Voltage	24Vdc(20~28Vdc)
	Output Voltage	8.4Vdc
	Power Consumption	60W(with Main Body + Extra Battery Pack)
	Voltage Sag	24Vdc, Within 10ms
	Insulation Resistance	500Vdc, 10MΩ
	Status LED	3 LEDs(Main Battery Pack, Power, Sub Battery Pack) Built in
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: 10sF < 25Hz(2G) X,Y,Z each direction(for 30 minutes)
	Noise Immunity	1000Vp-p(Pulse width 1μs)
Structure	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)
	Certification	KC, CE
	External Dimension(mm)	214.5 x 125 x 154
	Weight(kg)	0.6
Cooling System	Natural air circulation	
Case Material	PC(Resistance to flame)	

PACKAGE CONTENTS



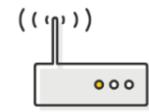
TOPRH0700WD-W



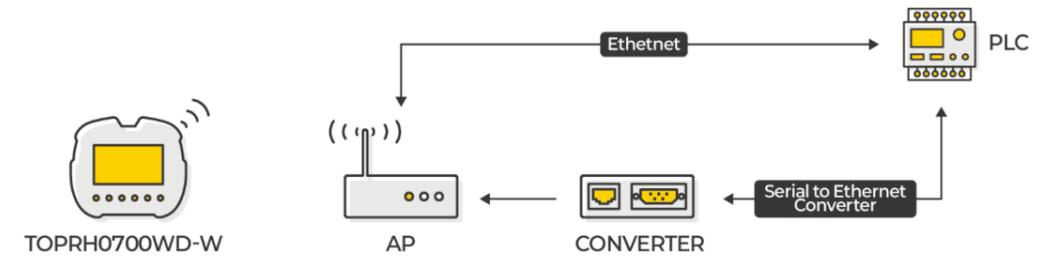
TOPRH-CRDL
Main Unit Docking
& Battery Charging



TOPRH-BAT
2 Units Provided
with Main Unit Purchase

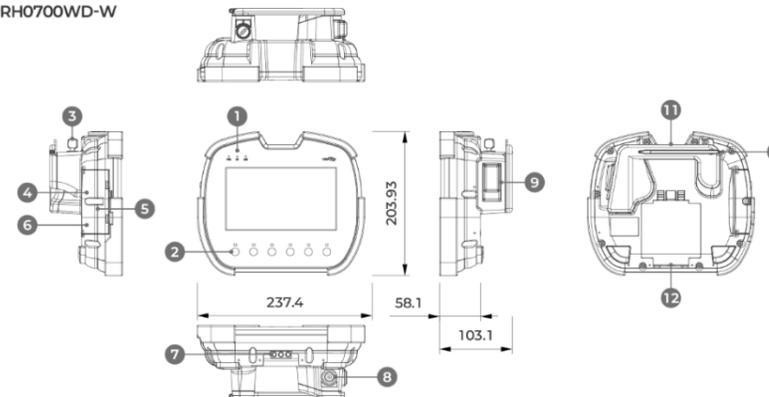


TOPRH Router
Option



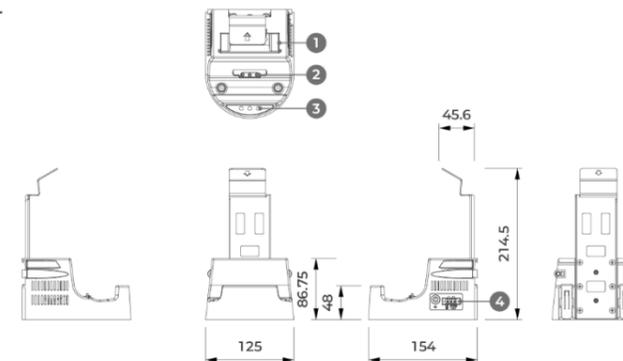
DRAWING

TOPRH0700WD-W



- 1 Status LED
- 2 Function Switch(with LED)
- 3 Key Lock Switch
- 4 SD Card Slot
- 5 USB Host 2P
- 6 USB OTG(Mini 5Pin B-Type)
- 7 Charging Terminal
- 8 Power Switch
- 9 3Position Switch
- 10 Touch Pen
- 11 Handle
- 12 Option Pack(Battery Pack)

TOPRH-CRDL



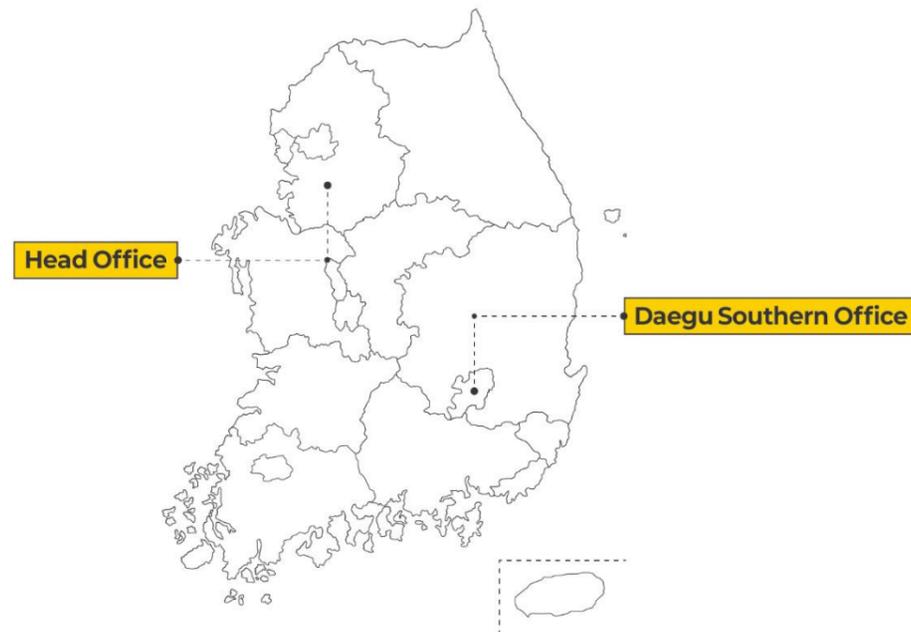
- 1 Charging Auxiliary Battery
- 2 Charging Terminal
- 3 Status LED
- 4 Power Input

GLOBAL BUSINESS NETWORK



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Sustainable Growth – Achieving Reliability and Productivity Through Continuous R&D
Embracing New Changes – A Total Smart Factory Solution Platform Company Based on AX-DX