M**2**I Corporation
Man · Machine · Interface

TOP NEXT

TOP NEXT

Product Catalog

M2I Corporation

V 1.0C 251225

m2i.co.kr/chn

M2I Corporation 基于 HMI/SCADA 的开发与制造，
拥有扩展至机器人控制与物流自动化领域的技术能力，
是一家基于 AX·DX 的智能工厂全方位解决方案平台企业。

TOP NEXT

CONTENTS

TOP NEXT LINE-UP

TOP **R** T 40 `PREMIUM` `Ex`　　　`15` `12` `10`

TOPR 系列下一代型号,
高速性能, 配备 IrDA 传感器与广角摄像头的高端 HMI

Ex / Non-Ex Premium HMI

TOP **R** T WIDE `PREMIUM` `Ex`　　　`19` `15`

电容触控, 宽大清晰的显示屏, 高速性能,
顶级配置包含 Wi-Fi、蓝牙、IrDA 与广角摄像头

Ex / Non-Ex Premium Wide HMI

TOP **R** C WIDE `STANDARD` `Ex`　　　`19` `15` `12`

电容触控, 宽大清晰的显示屏, 高速性能, 定义新标准的 HMI

Ex / Non-Ex Standard Wide HMI

TOP **R** W I/O　　　`7`

集成模拟与数字 I/O 的高效一体化 HMI

HMI with Integrated I/O

TOP **R** P

紧凑设计的盒式 HMI, 增强系统配置灵活性

Box Type HMI

TOP **R** N　　　`10` `7` `4`

适合自由设计与定制的开放框架 HMI

Open Frame HMI

工业现场 HMI 与 SCADA 操作

AI Metaverse Cloud ERP / MES DataBase

◁ 与上位系统智能集成

SCADA System (TOP-VIEW)

◁ OPC UA / Modbus / Fieldbus

HMI System (TOP)

◁ 各类现场设备的监控与控制

PLC / Controller Barcode / RFID Robot / AMR
Remote IO Motion Vision IoT Sensor
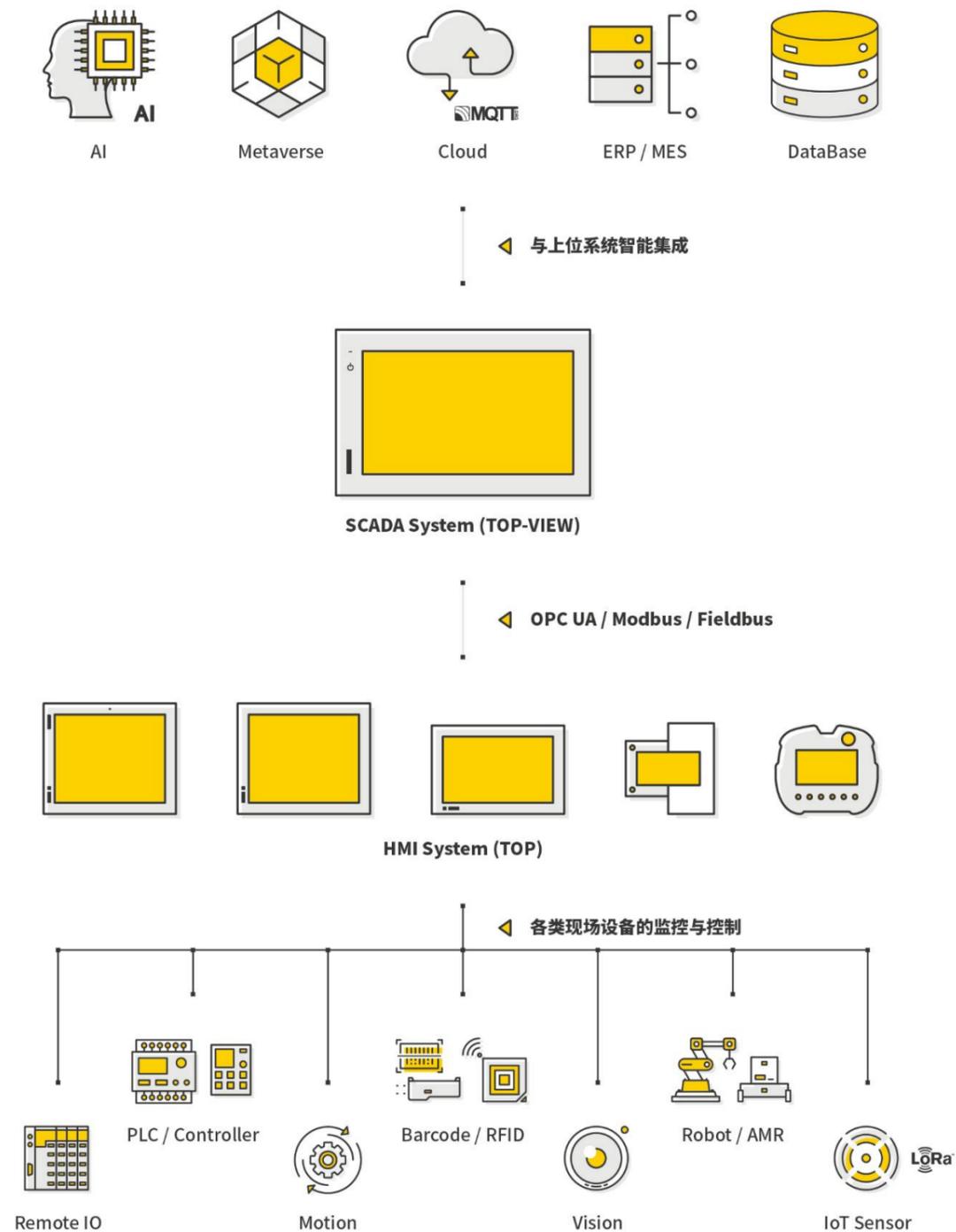
KEY FEATURES

400+ Protocol

全面支持 400 多种工业通信协议

支持多种工业通信协议,实现设备与系统间稳定的数据交互,并能在复杂的工业环境中灵活构建和运行系统。

21 CFR Part 11

提供 21 CFR Part 11 安全功能

遵循美国 FDA 21 CFR Part 11 标准,通过操作员认证、监控控制历史追踪、数据库管理及 PDF 管理,实现安全高效的工作环境。

OPC UA

支持工业标准 OPC UA

通过前瞻性且高度可扩展的 OPC UA 协议,实现数据的稳定采集与管理,并可与上位系统顺畅集成。

SECS / GEM

支持 SECS / GEM 协议

支持半导体行业使用的 HSMS SECS / GEM 通信协议,提供符合场景需求的稳定数据通信。

VNC

提供自主研发 VNC

借助高性能自主开发的 VNC,可远程访问工业现场的 TOP 与 TOP-VIEW 屏幕,并通过移动设备、平板或 PC 实现实时监控与控制。

SMS & Email

SMS 与电子邮件发送

根据程序中存储的 SMS 和电子邮件,自动发送以匹配现场情况,上级操作员或客户可即时了解工厂状况。

TOP Design Studio 软件

**可用于创建和编辑 HMI 项目文件,
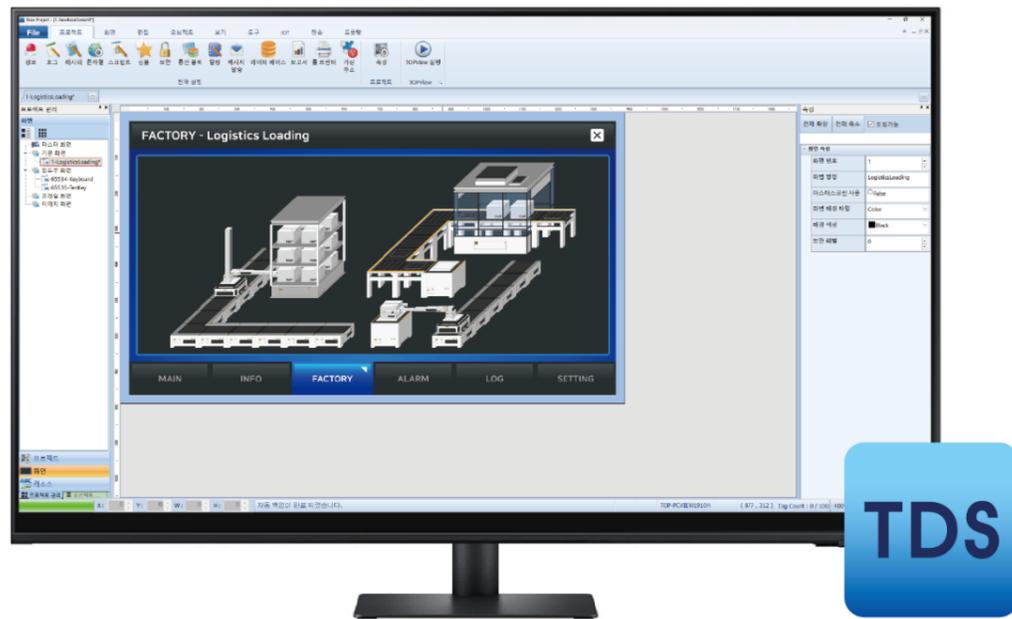可在 M2i 官方网站(m2i.co.kr)免费下载。**

直观的用户界面,操作简单
旧型号迁移支持 - 兼容 ATOP / XTOP 旧型号
出色动画效果 - 呈现生动流畅的动画
系统化用户培训 - 总部及大邱营业所提供支持
YouTube 培训内容 - 随时随地学习
KakaoTalk 技术咨询 - 现场即时获取技术支持

TOP Design Studio

KEY FEATURES

功能实现通过"效果与动作"统一管理

无论对象的形状或类型如何,都可通过"效果与动作"属性
以相同方式实现功能。
采用 [条件] - [效果] - [动作] 结构,当条件满足时,
系统将执行预设的效果或动作。

提供离线 / 在线虚拟运行功能

离线虚拟运行:
无需 TOP 与控制器,
即可在 TDS 中直接对项目进行试运行。
在线虚拟运行:
在 PC 连接的控制器上运行实际程序的同时
可在 TDS 中对项目进行试运行。(限时 2 小时)

持续更新的图像库

提供多种 16M 全彩图像,
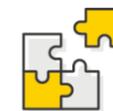包括无论大小都保持清晰质量的矢量图,
以及增强立体感的 3D 图像库。

数据分析优化

TDS 可高效搜索数据并以表格形式进行监控,
并通过趋势图、记录图、条形图、仪表图、
饼图等多种图表实现直观的数据分析。

JavaScript

提供 JavaScript 编程支持

利用互联网最广泛使用的 JavaScript,
可在 TDS 中高效扩展项目。
从简单命令到条件语句、循环、函数等多种编程语法,
都可通过示例轻松实现。

HMI 与 SCADA 项目互通

TDS 可同时实现 TOP (HMI) 与 TOP-VIEW (SCADA) 项目,
并支持两者之间的转换。

TOPRT40 SERIES
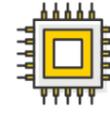
Ex / Non-Ex Premium HMI

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)
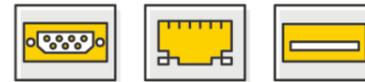
Ex

Non-Ex

FEATURES

增强型 CPU

相比 TOPRT1210SD-Ex 型号，速度提升两倍。

铝制机身

铝制机身，兼具坚固耐用与高端设计。

串口 / 以太网 / USB 接口

提供3个串口：COM1 / COM2 / COM3。
支持具有不同IP的双通道以太网网络。
前置2.0 USB OTG及HOST接口。
后置3.0 USB HOST接口 x 2。

T6 温度等级防爆认证

获得防爆认证标准：KCs（韩国）、ATEX（欧洲）、
IECEx（国际）、Hazloc（北美）。

内置 IrDA（红外线）传感器（可选）

可与本公司条码扫描器进行无线通信。
0.5 米范围内自动识别。

内置前置摄像头（可选）

内置可调角度广角摄像头。

提供近距离传感器 / 自动亮度传感器

内置近距离传感器，可根据工作距离切换模式。
内置自动亮度传感器，用于调节屏幕亮度。

可选摄像头、SD卡及IrDA传感器

| Model		Camera	SD Card	IrDA Sensor
	Blank	O	X	O
	01	X	X	O
	02	O	O	O
TOPRT1540(-Ex)	03	X	O	O
TOPRT1240(-Ex)	04	O	X	X
TOPRT1040(-Ex)	05	X	X	X
	06	O	O	X
	07	X	O	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(㎜)	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)		
	Backlignt Type	LED		
	Backlight Life	50,000 hours		
Touch	Touch Type	Analog Resistive Film		
	Resolution(Cell)	1024 x 768		800 x 600
Interface	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	IEEE802.3i/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 M2I 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: Up20º, 10º, 0º, Down10º		USB UVC Max. Resolution: 640 x 480
	Proximity Sensor	YES		
	Illumination Sensor	YES		
	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, Link) Built in		
Power	Input Voltage	20 ~ 28Vdc		
	Power Consumption	25W	18W	15W
	Voltage Sag	24Vdc, Within 10ms		
	Insulation Resistance	500Vdc, 10㏁		
Environment	Operation Temperature(℃)	−10 ~ +50		
	Storage Temperature(℃)	−20 ~ +60		
	Operation Humidity(%RH)	0 ~ 90(No Dew)		
	Atmosphere	No Corrosive Gas		
	Vibration Endurance	Amplitude: 10≤F < 25㎐(2G) X, Y, Z each Direction(for 30 Minutes)		
	Noise Immunity	1000Vp-p(Pulse Width 1㎲)		
	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		
Structure	Panel Cut(㎜)	355 x 286	306 x 247	260 x 202
	External Dimension(㎜)	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□
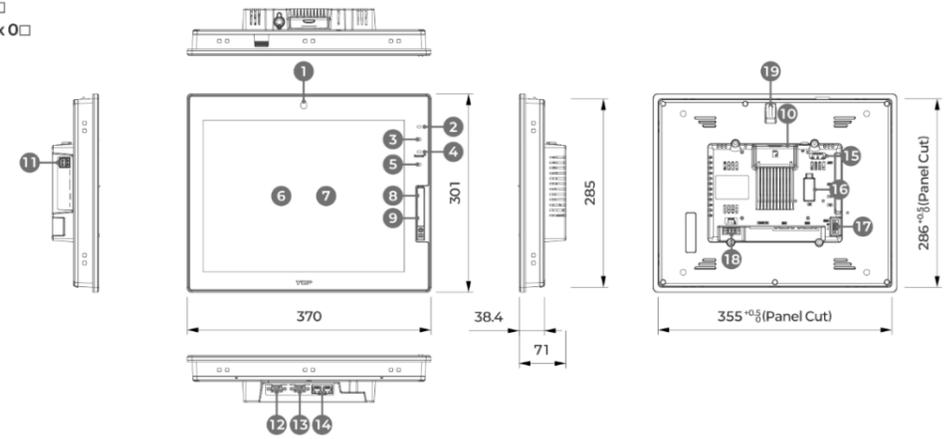
TOPRT1240XD 0□
TOPRT1240XD-Ex 0□
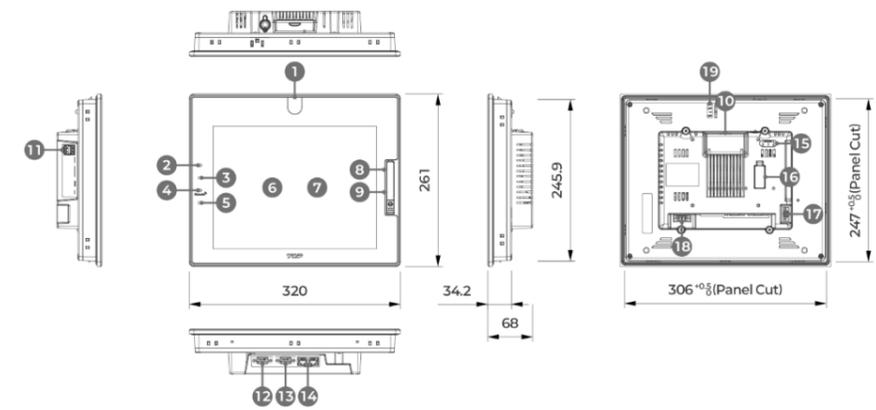
TOPRT1040SD 0□
TOPRT1040SD-Ex 0□
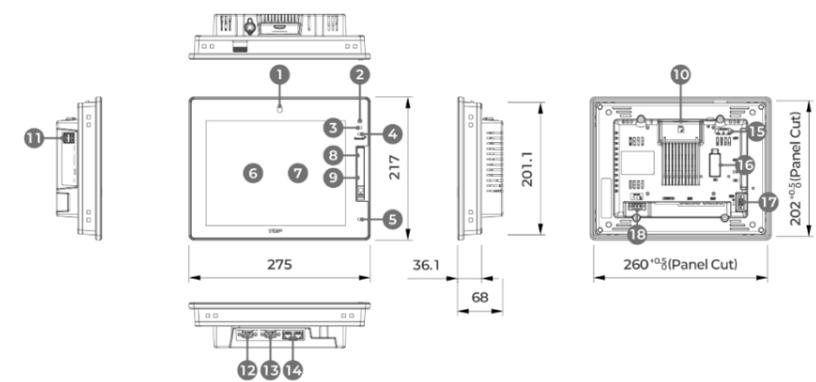
1	Camera	6	LCD Panel	11	USB Host 2P
2	Power LED	7	Touch Panel	12	Serial COM2
3	Illumination Sensor	8	USB OTG	13	Serial COM1
4	IrDA Sensor	9	USB Host	14	Ethernet 2Ch
5	Proximity Sensor	10	SD Card Slot	15	Status LED
16	Expansion Module Connector
17	Serial COM3
18	Power Input
19	Camera Angle Adjustment Lever

TOPRT WIDE SERIES

Ex / Non-Ex Premium 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)
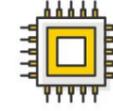
Ex   KC CE [UL LISTED Hazloc] [KCs] [IECEx] [Ex]

Non-Ex   KC CE [UL LISTED]

FEATURES

增强型 CPU

相比 TOPRT1210SD-Ex 型号,速度提升两倍。
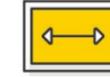
配备清晰的电容式触控传感器

16:9宽屏 1366 x 768 高分辨率显示屏。
采用IK07等级钢化玻璃,提高抗冲击能力。

前置铝合金框架

具有坚固耐用性的前置铝合金框架。
极简边框设计,外观时尚。

T6温度等级防爆认证

通过ATEX、IECEx和Hazloc防爆认证,确保安全。

IrDA(红外)传感器 / 蓝牙

支持与自有条码扫描器通过IrDA / 蓝牙进行无线通信。

内置前置摄像头

内置可调角度广角摄像头。

串口 / 以太网 / USB 接口

提供3个串口:COM1 / COM2 / COM3。
支持具有不同IP的双通道以太网网络。
前置2.0 USB OTG及HOST接口。
后置3.0 USB HOST接口 x 2。

可选Wi-Fi和蓝牙功能

Model		Wi-Fi	Bluetooth
	Blank	O	O
TOPRT1950WD(-Ex) TOPRT1550WD(-Ex)			
	01	X	X

TOP RT WIDE

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)	
	Backlight Type	LED	
	Backlight Life	50,000 hours	
Touch	Touch Type	Capacitive	
Interface	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	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	IEEE 802.3i, IEEE 802.3u, IEEE 802.ab, 10Base-T/100Base-TX/1000Base-T Connector: RJ-45 x 2	
	USB Host	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 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: 2.400GHz ~ 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)	
	*Bluetooth	2402MHz ~ 2480MHz, Bluetooth® 5.0(BLE), Range up to 5M in open space	
	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 M2I HMI equipment.	
	SD Card	SD card slot x 1, SDHC(Max. 32GB), SDXC(Max. 1TB)	
	Option Modules	CAM32	
	Audio	3.5mm Audio jack output	
	HDMI	HDMI v2.0, Max. 1366 x 768	
	Front Camera	USB UVC Max. resolution: 640 x 480 5 Adjustable angles: Up 20º, 10º, 0º, Down 10º, 20º	
	Proximity Sensor	YES	
	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, Link) built in	
Power	Input Voltage	24Vdc(20 ~ 28Vdc)	
	Power Consumption	40W	
	Voltage Sag	24Vdc, Within 10ms	
	Insulation Resistance	500Vdc, 10MΩ	
Environment	Operation Temperature(℃)	-10 ~ +50	
	Storage Temperature(℃)	-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	IP54(front)	
	Certification	General Model: KC, CE, UL/cUL Explosion Proof Model: KC, CE, UL/cUL in Hazloc, KCs, IECEx, ATEX	
Structure	Panel Cut(mm)	463 x 314	392 x 272
	External Dimension(mm)	477.4 x 328.4 x 63.5	406.4 x 286.4 x 63.5
	Weight(kg)	5.30	4.10
	Cooling System	Natural air circulation	
	Case Material	Aluminum + Plastic	

* Wi-Fi and Bluetooth Options Available.

DRAWING

TOPRT1950WD 0□
TOPRT1950WD-Ex 0□

TOPRT1550WD 0□
TOPRT1550WD-Ex 0□

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

TOPRC WIDE SERIES

Ex / Non-Ex Standard 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
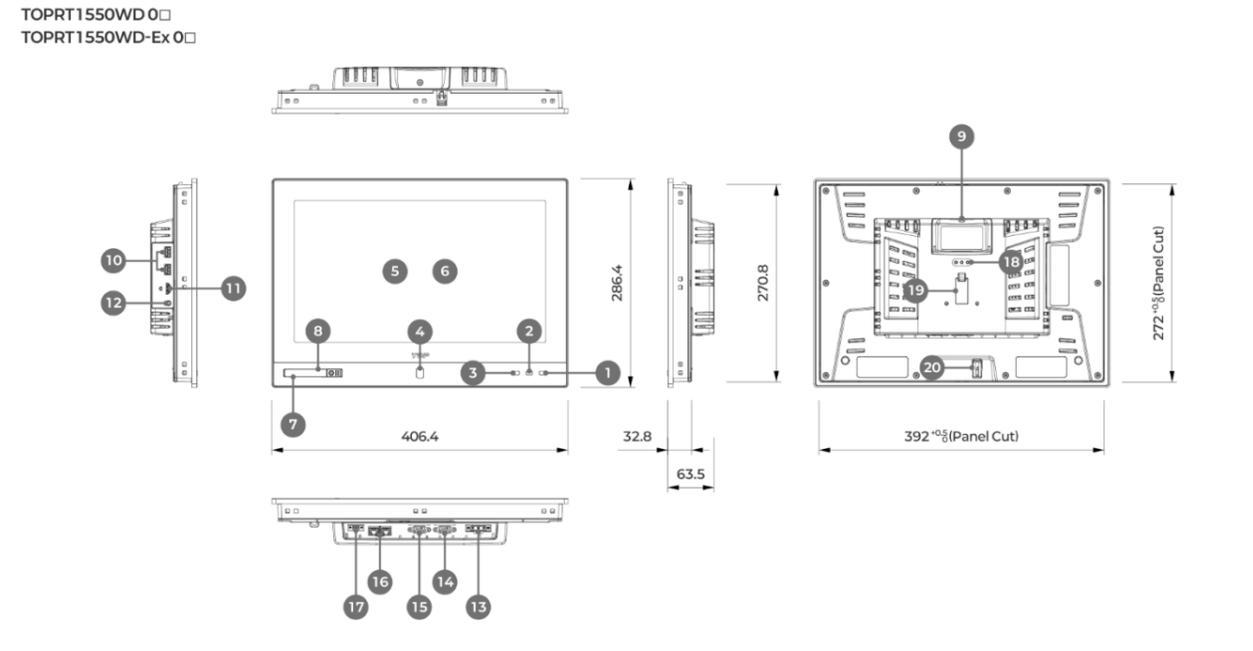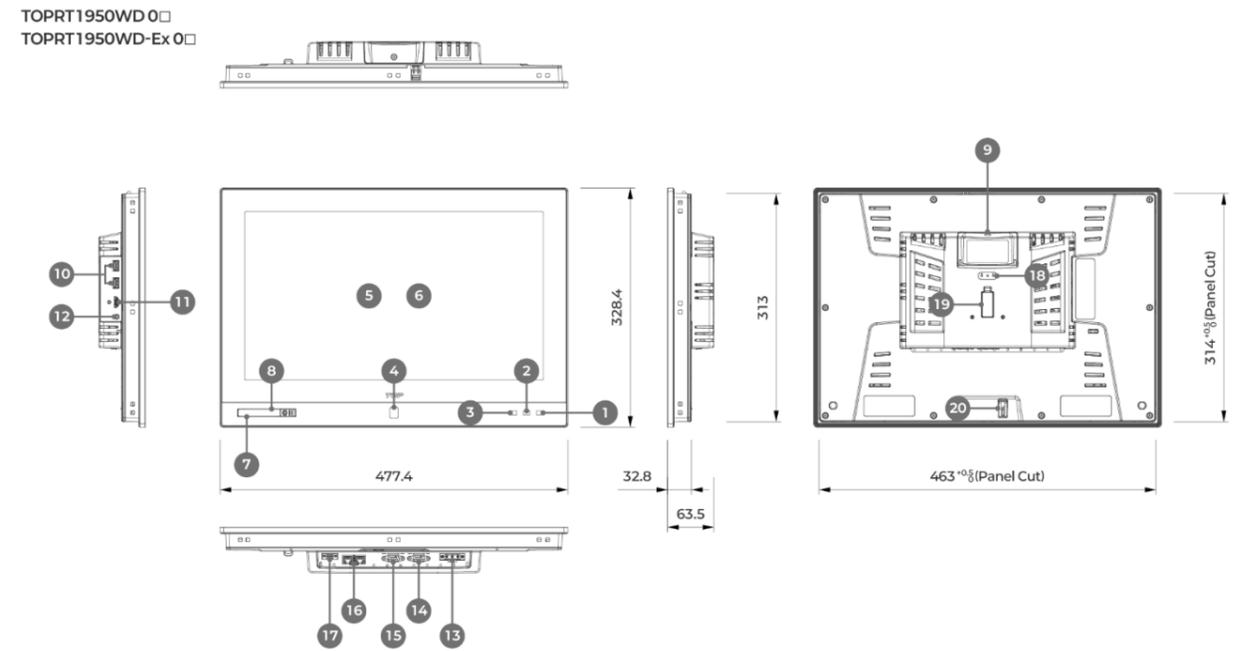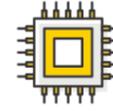
Ex

Non-Ex

FEATURES

增强型 CPU

相比 TOPRT1210SD-Ex 型号,速度提升两倍。
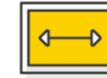
配备清晰的电容式触控传感器

16:9宽屏 1366 x 768 高分辨率显示屏。
采用IK07等级钢化玻璃,提高抗冲击能力。

后置铝合金框架

具有坚固耐用性的后置铝合金框架。
极简边框设计,外观时尚。
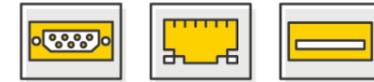
串口 / 以太网 / USB 接口

提供 COM1/COM2/COM3 三个串口。
支持具有不同 IP 的双通道以太网网络。
提供前置 USB OTG 和 HOST 接口。
提供后置 USB HOST 两个接口。

IrDA(红外线)传感器 / 蓝牙

支持通过 IrDA /
蓝牙与本公司条码扫描器进行无线通信。

可选Wi-Fi和蓝牙功能

Model		Wi-Fi	Bluetooth
TOPRC1900WD(-Ex) TOPRC1500WD(-Ex) TOPRC1200WD(-Ex)	Blank	O	O
	01	X	X

TOPRC WIDE SPECIFICATIONS

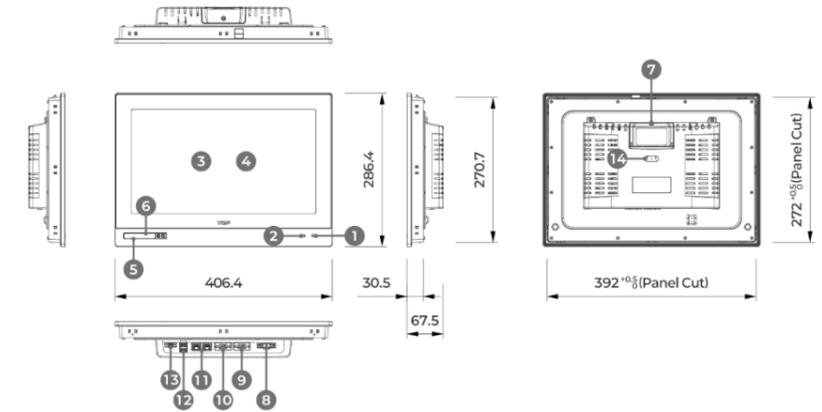|	Non-Ex Model Ex Model	TOPRC1900WD 0□ TOPRC1900WD-Ex 0□	TOPRC1500WD 0□ TOPRC1500WD-Ex 0□	TOPRC1200WD 0□ TOPRC1200WD-Ex 0□
Display	Display Type	18.5" TFT Color	15.6" TFT Color	12.1" TFT Color
	Color		16M Colors	
	Display Area(mm)	409.8 x 230.4	344.2 x 193.5	261.12 x 163.2
	Resolution(dot)		1366 x 768	1280 x 800
	Brightness Level		10 Levels(by software)	
	Backlight Type		LED	
	Backlight Life		50,000 hour	
Touch	Touch Type		Capacitive Touch	
	Resolution(Cell)		1366 x 768	1280 x 800
Interface	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		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)	
	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		Compliant to IrDA physical layer standard up to 115.2 kbit/s (SIR), Range up to 0.7M in open space *Dedicated use of M2I 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	
	Status LED		3 LEDs(Power, Operation, Link) Built in	
Power	Input Voltage		24Vdc(20~28Vdc)	
	Power Consumption		40W	
	Voltage Sag		24Vdc, Within 10ms	
	Insulation Resistance		500Vdc, 10MΩ	
Environment	Operation Temperature(℃)		-10 ~ +50	
	Storage Temperature(℃)		-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		IP65(Front)	
	Certification		General Model: KC, CE, UL/cUL Explosion Proof Model: KC, CE, UL/cUL in Hazloc, KCs, CCC, IECEx, ATEX	
Structure	Panel Cut(mm)	463 x 314	392 x 272	310 x 240
	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□
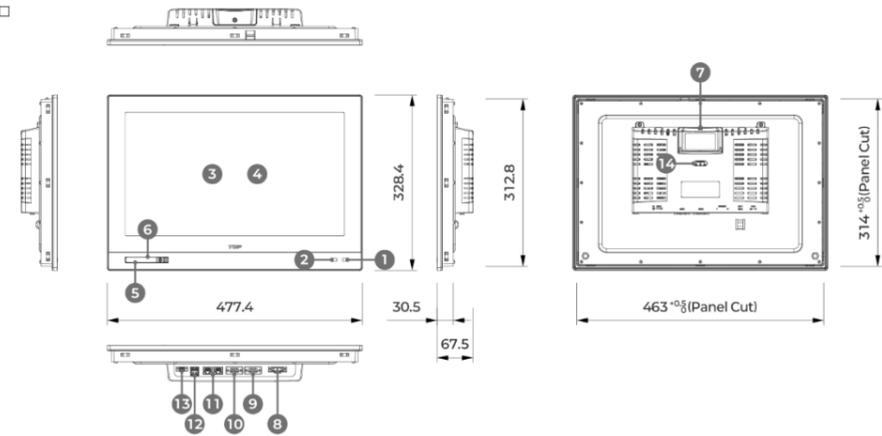
TOPRC1500WD 0□
TOPRC1500WD-Ex 0□

TOPRC1200WD 0□
TOPRC1200WD-Ex 0□
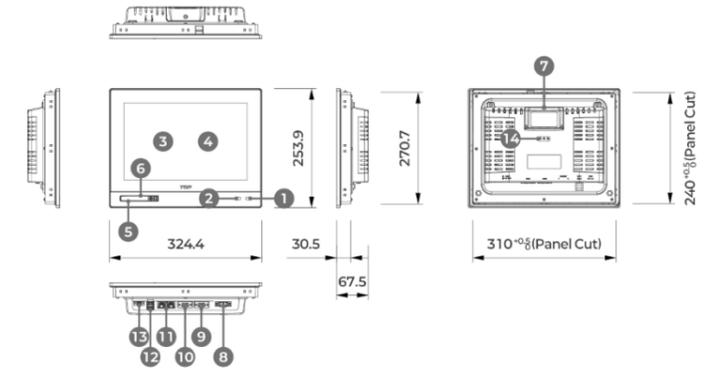
1	Power LED	5	USB OTG	9	Serial COM1	13	Serial COM3
2	IrDA Sensor	6	USB Host	10	Serial COM2	14	Status LED
3	LCD Panel	7	SD Card Slot	11	Ethernet 2Ch		
4	Touch Panel	8	Power Input	12	USB Host 2P		

TOPRW-IO SERIES

HMI with Integrated I/O

INTERFACE *Varies by Model.*

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

FEATURES

灵活的 I/O 支持

数字输入 16 路,数字输出 SINK 16 路。
* 模拟输入(电压 2 路,电流 2 路)。
* 模拟输出(电压 2 路,电流 2 路)。
* RTD 2 路。
(* 仅适用于 TOPRW0700WD-IO 型号)
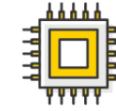
四核 CPU

配备四核 CPU,支持高速处理。

1600 万色全彩

亮丽清晰的全彩显示,支持矢量与 3D 图像库。

支持 800 x 480 高分辨率

7 英寸宽屏比例,可提供更宽广的工作区域。

前置 OTG USB 接口

支持在 传输模式 下方便地传输程序,
并可在 HOST 模式 下连接 USB 设备
(存储器、条码扫描器、相机等)。

时尚一体化机身设计

兼具高雅感与轻便操作性。

触控拖拽功能

可在屏幕上绘制图形以留备忘,
或交互式下拉顶部菜单。

与XTOP WIDE系列兼容

提供与停产XTOP WIDE产品(7")相同的面板开孔。
可轻松替换现有XTOP WIDE产品。

TOP RW I/O

TOPRW-IO SPECIFICATIONS

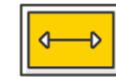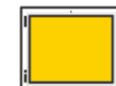|	Functional		TOPRW0700WD-IO	TOPRW0710WD-IO
Display	Display Type		7" TFT Color	
	Color		16M Colors	
	Display Area(㎜)		154 x 86	
	Resolution(dot)		800 x 480	
	Brightness Level		10 Levels(by software)	
	Backlight Type		LED	
	Backlight Life		50,000 hours	
Touch	Touch Type		Analog resistive film	
	Resolution(Cell)		800 x 480	
	Touch Life		1 million times or more	
Interface	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	
	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	
	Ethernet		IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX AUTO MDIX 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)	
	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	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	
Power	Input Voltage		24Vdc(20~28Vdc)	
	Power Consumption		15W	
	Voltage Sag		24Vdc, Within 10ms	
	Insulation Resistance		500Vdc, 10㏁	
Environment	Operation Temperature(℃)		-10 ~ +50	
	Storage Temperature(℃)		-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 1㎲)	
	Static Electricity Discharge		Connective discharge from EN61000-4-2: ±4㎸	
	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(㎜)		197 x 127	
	External Dimension(㎜)		212 x 145 x 62.5	
	Weight(㎏)		0.81	
	Cooling System		Natural air circulation	
	Case Material		Plastic	

MuLiN Creator

01	基于IEC-61131-3标准创建梯形图程序	02	将程序传输到TOPRW-IO系列以执行梯形逻辑

Ethetnet ← TOP **Rw** IO ← 连接 Fan, Sensor Motor, Lamp Robot, Servo

执行梯形图程序

TOPRW-IO SPECIFICATIONS

	Functional	Digital Input	Digital Output
Type	Input/Output Type	16 channels Sink and Source Type	16 channels Sink Type
Power	Input/Output Voltage	24Vdc typ. On-State Min. 11.0Vdc ~ Max. 28.8Vdc, Off-State Max. 5Vdc	24Vdc typ. Min. 11.0Vdc ~ Max. 28.8Vdc, On-State Voltage Drop: Max. 0.3Vdc@25℃ Off-State Leakage Current: Max. 50uA
	System Power Dissipation	Max. 70mA	Max. 120mA
	Input Current in On State	Max. 6mA/Channel@28.8Vdc	N/A
	Output Current in On State	N/A	Max. 0.5A/Channel@28.8Vdc
	Max. On-State Voltage Drop	N/A	Max. 0.3Vdc@25℃
	Off-State Leakage Current	N/A	Max. 50uA
Interface	Typ. Input Impedance	Typ. 4.7KΩ	N/A
	Input/Output Signal Delay	Off to On: Max. 0.1ms On to Off: Max. 0.5ms	Off to On: Max. 0.3ms On to Off: Max. 0.5ms
	Input Filter(Digital)	0.5ms	N/A
	Isolation	I/O to Logic: Photocoupler isolation	
	Field Power	Typ. 24Vdc(11.0Vdc ~ 28.8Vdc)	
Other	Wiring	AWG 26 to 20	
	Pin No.	Removable Terminal Block 20P	

* 模拟I/O仅在TOPRW0700WD-IO型号中提供。

	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	2 Channels Analog Current Type
	Sensor Type and Input/Ouput Range	PT100 * -200.0 to +850.0℃	0 ~ 5 Vdc	0 ~ 20mA	0 ~ 5 Vdc	0 ~ 20mA
Power	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	Max. 350Ω
	Data Format		16bits Integer			
	Resolution	0.0312ºC/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℃, ±0.3% Full Scale@0℃, +60℃			
	Isolation		Capacitive isolation			
	Common Type	2COM (1 Common/1 Channel)	2 COM(Single Common)			
Other	Wiring		AWG 26 to 20			
	Pin No.		Removable Terminal Block 10P(3.5mm pitch)			

DRAWING

TOPRW0700WD-IO
TOPRW0710WD-IO

145
212
6
62.5
197 ⁺⁰₋₅(Panel Cut)
127 ⁺⁰₋₅(Panel Cut)
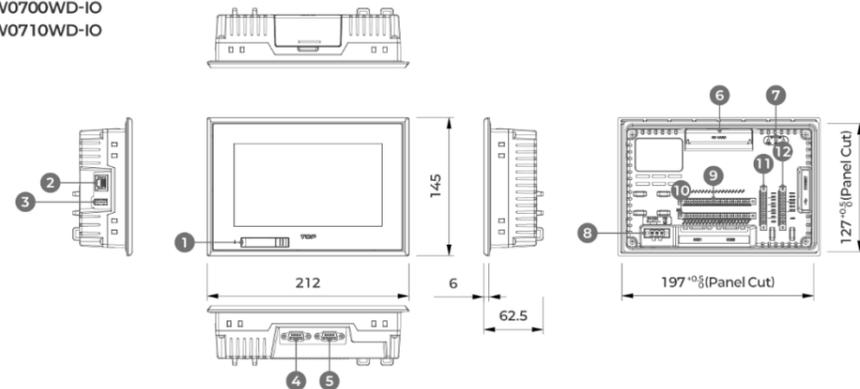
1. USB OTG(Mini 5Pin B-Type)
2. Ethernet 1Ch
3. USB Host 1P
4. Serial COM2
5. Serial COM1
6. SD Card Slot
7. Status LED
8. Power Input
9. Digital Input Terminal
10. Digital Output Terminal
11. Analog I/O Terminal
12. RTD Input Terminal

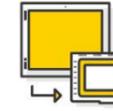# **TOPRP** SERIES

Box Type HMI

INTERFACE

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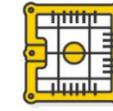- USB OTG
- SD CARD
- HDMI OUT

TOP RP

FEATURES

紧凑型机身框架

小尺寸设计，即使在有限空间也可轻松安装。

提供标准DIN导轨 / VESA孔

可通过标准DIN导轨轻松安装于任何位置。
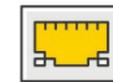可通过标准VESA固定支架(*可选)轻松与显示器结合。

HDMI 输出

可通过HDMI轻松连接多种显示器。
兼容M2i专用触控显示器(MDP)。

与TOP产品兼容

采用四核CPU支持高速处理。
提供与TOP相同的菜单和操作方式。

提供2个以太网通道

支持具有不同IP的异构网络。
支持VNC(远程监控/控制)功能。

提供2个串行端口

COM1/COM2 配备DSUB 9针。
支持RS-232C、RS-422/485通信。
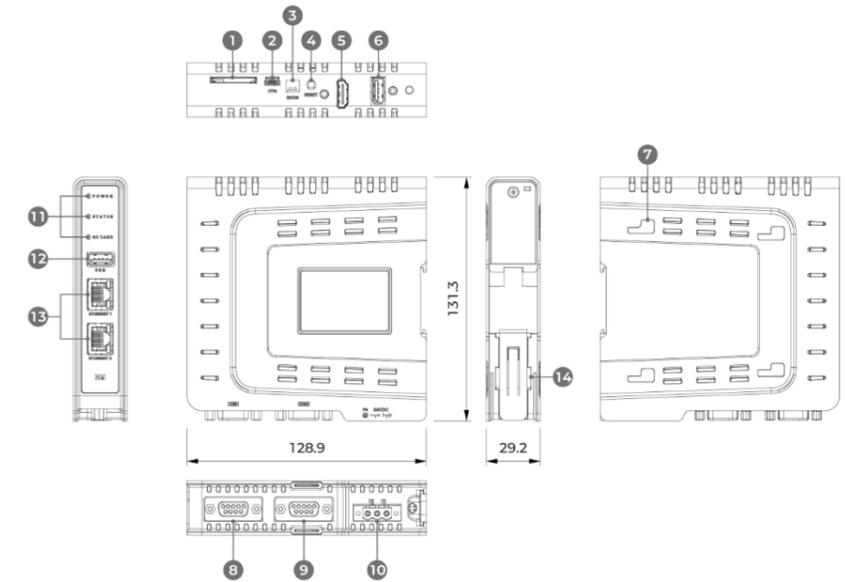
提供2个USB Host端口

用于连接鼠标、键盘、USB存储器、
条码扫描器等外部设备。

OTG USB 接口

支持在 传输模式 下方便地传输程序，
并可在 HOST 模式 下连接 USB 设备
(存储器、条码扫描器、相机等)。

TOPRP SPECIFICATIONS

	Functional	TOPRP1000D
Interface	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
	Ethernet	IEEE802.3i/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(℃)	-10 ~ +50
	Storage Temperature(℃)	-20 ~ +60
	Operation Humidity(%RH)	0 ~ 90(No dew)
	Atmosphere	No corrosive gas
	Vibration Endurance	Amplitude: 10≤F<25㎐(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
	Certification	KC, CE, UL/cUL
Structure	External Dimension(㎜)	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

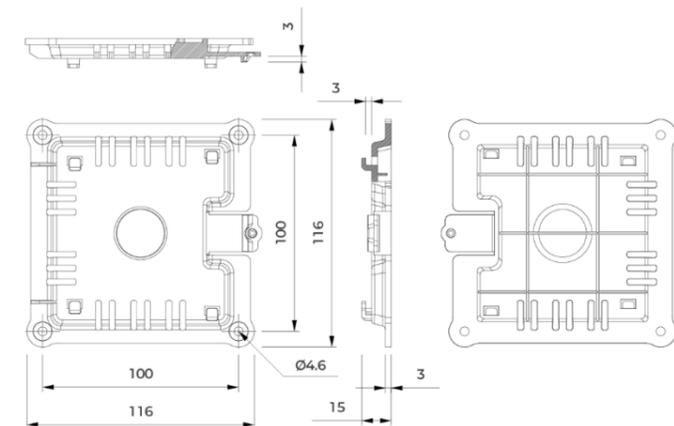|						
1 SD Card Socket	4 Reset Switch	7 Vesa Bracket	10 Power Input	13 Ethernet Port
2 USB OTG	5 HDMI	8 Serial COM1	11 Status LED	14 DIN Rail
3 Mode Switch	6 USB Host #1	9 Serial COM2	12 USB Host #2	

VESA Braket(* Option)
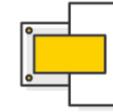
TOPRN SERIES

Open Frame HMI

INTERFACE　* Varies by Model.

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

FEATURES

开放式框架设计，实现自由的外部设计

支持无外露框架的整洁嵌入式安装。
可选择标准安装或平面安装方式。
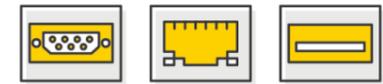提供安装孔，方便快速组装和安装。
支持横向和纵向屏幕方向。

提供紧凑且灵活的尺寸

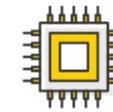紧凑设计，适合狭小空间。
根据各行业设备规格提供可定制尺寸。

平面操作面，提供便捷的使用环境

防止灰尘或杂质堆积，保持清洁状态。
前面板附加防水防尘功能。
在潮湿环境下也能实现稳定操作。

优化的接口配置

即使在复杂的工业环境中，
也能提供充足的连接性和扩展性。
提供串口、以太网通道和USB接口。

高性能硬件规格

配备Quad Core CPU以支持高速处理。
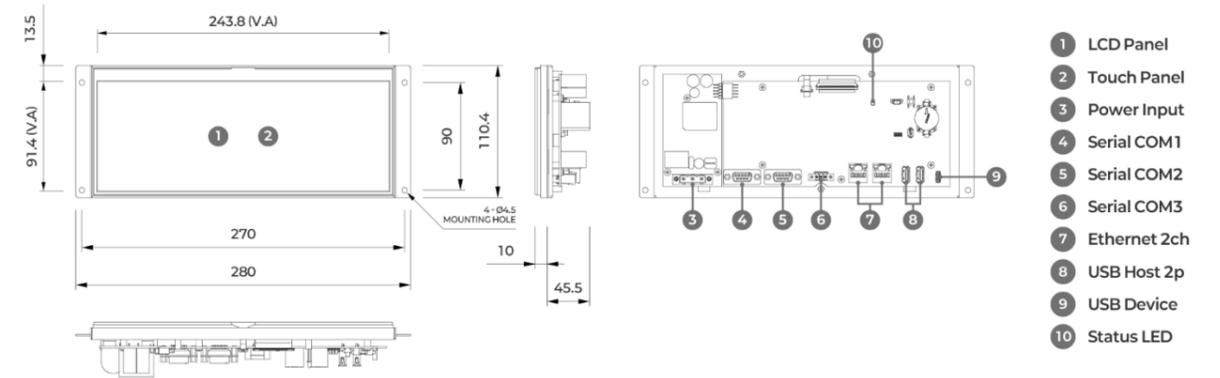支持16M全彩显示和矢量图像库。
提供触控拖拽和便签功能等直观的用户界面操作。

拥有最多的工业通信协议
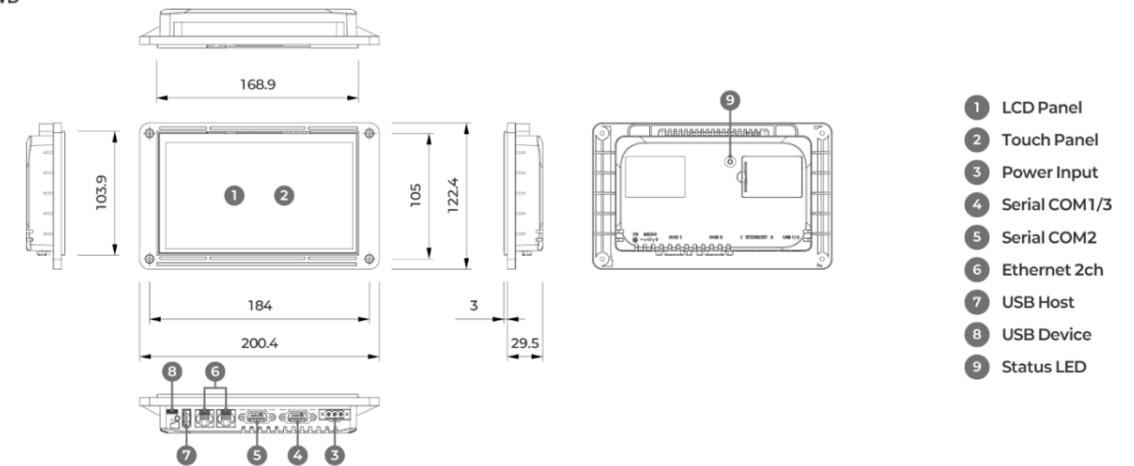
与400多种控制器广泛兼容。
支持Modbus、EtherNet/IP等最新工业网络。

TOP RN

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(㎜)	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	
Interface	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		Connector: USB Type A x 1
	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		
	Status LED	1 LED(Operation) Built in		
Power	Input Voltage	24Vdc(20 ~ 28Vdc)		
	Power Consumption	15W		
	Voltage Sag	24Vdc, Within 10ms		
	Insulation Resistance	500Vdc, 10MΩ		
Environment	Operation Temperature(℃)	-10 ~ +50		
	Storage Temperature(℃)	-20 ~ +60		
	Operation Humidity(%RH)	0 ~ 90(No dew)		
	Atmosphere	No corrosive gas		
	Vibration Endurance	Amplitude: 10≤F < 25㎐(2G) X, Y, Z direction(for 30 minutes)		
	Noise Immunity	1000Vp-p(Pulse width 1µs)		
	Electrostatic Discharge	Connective discharge from EN61000-4-2: ±4㎸		
	Shock Endurance	10G X, Y, Z each direction(for 3 times)		
	Ground Connection	Class 3(100Ω or less)		
	Certification	KC, CE, UL/cUL		
Structure	Panel Cut(㎜)	TBD	155 x 87	97.5 x 56
	External Dimension(㎜)	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

1. LCD Panel
2. Touch Panel
3. Power Input
4. Serial COM1
5. Serial COM2
6. Serial COM3
7. Ethernet 2ch
8. USB Host 2p
9. USB Device
10. Status LED

TOPRN0700WD

1. LCD Panel
2. Touch Panel
3. Power Input
4. Serial COM1/3
5. Serial COM2
6. Ethernet 2ch
7. USB Host
8. USB Device
9. Status LED

TOPRN0400WD

1. LCD Panel
2. Touch Panel
3. Power Input
4. Serial COM1/2/3
5. Ethernet
6. USB Device
7. USB Host
8. Status LED

* 有关面板制作的详细信息，请参阅硬件手册。

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