

Caution : Before operating the products, be sure to read all related manuals

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- Actual user screens may differ from those of the monitor screen of PC.
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Compliance with the RoHS Directive

M2I has taken steps to meet requirements for environmental preservation and has sought to comply with the RoHS Directive by adopting measures to eliminate specified harmful substances from existing products to be manufactured and sold beginning in 2007.



Conformity with International Safety Standards

The CE Mark and the UL or c-UL and Recognized Component Marks which are printed in TOP guarantee compliance with safety standards accepted in countries and regions worldwide.

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Increasing your value



Strengthen Customer's Industrial Value
TOP

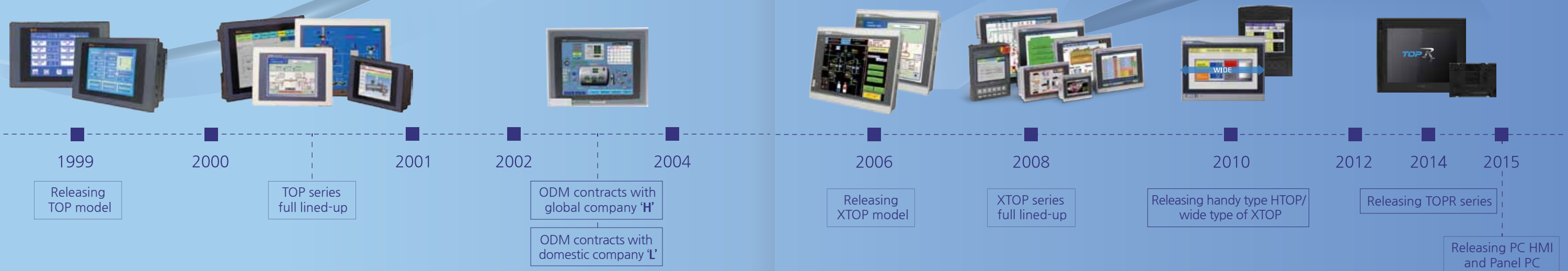
Know-how and Professionalism with long history of only HMI

M2I corporation is a professional system development company that was founded in 1999 to produce Embedded HMI Panel and Operator Interface Panel. For dramatic change of industrial structure and technology, M2I is focusing on endless R&D and technical service.

Also M2I's efforts in brand value and quality control support customized products development and full line-up of customer's need.

As our goal, Enhancing customers' competitiveness by know-how and experiences in industrial area, M2I Corporation is cooperating with all of our customers, and we will contribute your improved productivity by developing innovative products and services.

TOP HISTORY



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Product Introduction	
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Display

Logistics, Inspection, Scrubber, Return device



Textile

Dyeing, Printing, Dry-clean, Knitting



Energy

Oil refining, Batteries, Solar system, Power generation, Water resources



Chemicals/ Steels

Pharmaceuticals, Plastics, Cosmetics, Chemical production, Steelmaking



Semiconductor/ Electricity

Gas cabinet, VMB, BSGS, Scrubber, Laser marker, Loader/Unloader, Chamber, Lead framer



Food

Noodle, Soup, Snacks, Milk, Packing, Storage



Automobile/ Shipbuilding

Painting, Welding, Pressing, Assembly



Eyes of production area

Hands of production process

Common

TFT LCD
65536 Color
SRAM Memory 512KB

R Resolution
M Memory

Standard

ED-E

ED

Wide

Handy

Complete line-up for various demands

15"

12"

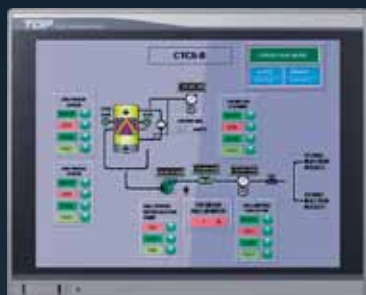
10"

8"

7"

5"

4"



DC XTOP15TX-SD AC XTOP15TX-SA
R 1024×768 M 26M



DC XTOP12TS-SD AC XTOP12TS-SA
R 800×600 M 26M



DC XTOP10TS-SD AC XTOP10TS-SA
R 800×600 M 26M
DC XTOP10TV-SD AC XTOP10TV-SA
R 640×480 M 26M



DC XTOP08TS-SD DC XTOP08TV-SD
R 800×600 R 640×480
M 26M M 26M



DC XTOP05TQ-SD
R 320×240
M 26M



DC XTOP10TV-ED-E
R 640×480
M 26M



DC XTOP08TV-ED-E
R 640×480
M 26M



DC XTOP05TQ-ED-E
R 320×240
M 6M



DC XTOP10TV-ED
R 640×480
M 26M



DC XTOP08TV-ED
R 640×480
M 26M



DC XTOP05TQ-ED
R 320×240
M 6M



DC XTOP10TW-UD-E
XTOP10TW-UD
R 800×480
M 26M



DC XTOP07TW-LD
XTOP07TW-LD-E
R 800×480
M 26M



DC XTOP04TW-UD
R 480×272
M 6M



DC HTOP05TV-SD-W2 DC HTOP05TQ-SD-W2
HTOP05TV-SD2 HTOP05TQ-SD2
R 640×480 R 320×240
M 26M M 26M

TOP Series

1. XTOP Series



5", 8", 10", 12", 15"

Including all functions

Standard Type



* Option

Economy type including all functions except Fieldbus

ED-E Type



5", 8", 10"



Economy type including all functions except Fieldbus, Ethernet, CF Memory

ED Type



5", 8", 10"



2. Wide Series



4", 7", 10"

Extended wide display with cost reduction

Wide Type



* Please refer to hardware datasheet for the difference of each model's communication port.

3. HTOP Series



5"

Operation while moving by hand-held (wired, wireless)

HTOP Type



4. Detail model name

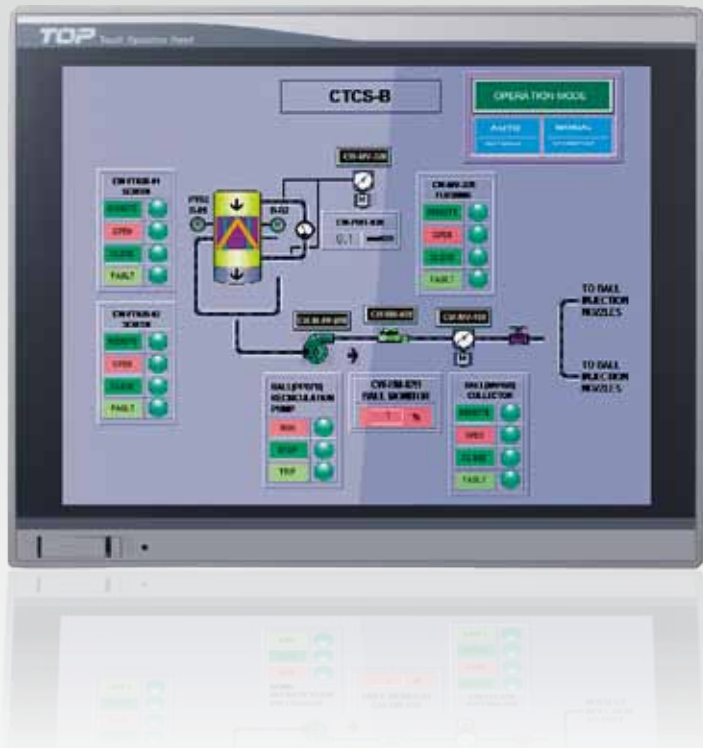
	LCD Size	LCD Type	Resolution		Detail		Power	Option
XTOP	04 : 4 "	T : TFT	Q : 320×240	-	S : Standard	-	A : AC (Power)	E : Ethernet
	05 : 5.7 "	M : Mono STN	V : 640×480		E : Economic		D : DC (Power)	
	07 : 7 "		S : 800×600		U : Universal			
	08 : 8.4 "		X : 1024×768		L : sLim			
	10 : 10.4 "		W: Wide Type					
	12 : 12.1 "							
HTOP	15 : 15 "							
HTOP	05 : 5.7 "	T : TFT	Q : 320×240		S : Standard		D : DC (Power)	W : Wireless
			V : 640×480					

XTOP 15"

DC XTOP15TX-SD AC XTOP15TX-SA

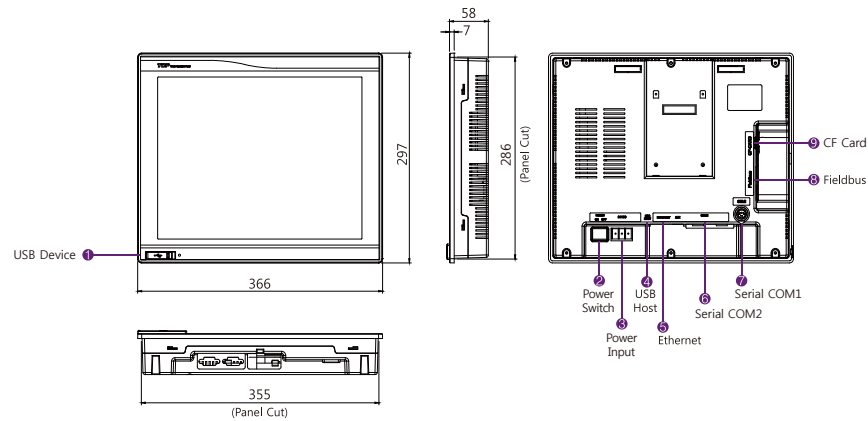


*Option



• Drawing

XTOP15TX-SD
XTOP15TX-SA

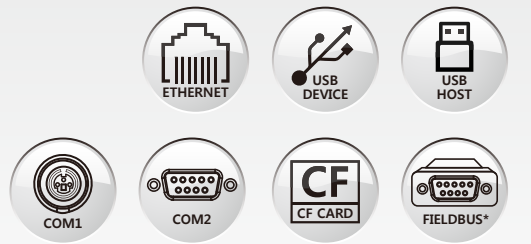


• Specifications

Functional		XTOP15TX-SD (DC)	XTOP15TX-SA (AC)
Display	Display Type	15" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	304.1x228.1	
	Resolution(dot)	1024x768	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
Touch	Backlight Life	50,000 hours	
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
Interface	Resolution(Cell)	1024x768	
	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: PS2 6pin or DSUB 9pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 9pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	
	Option Module	Fieldbus(Profibus, CC-Link)	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
Memory & Others	Screen Memory	26MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25℃)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

XTOP 12"

DC XTOP12TS-SD AC XTOP12TS-SA

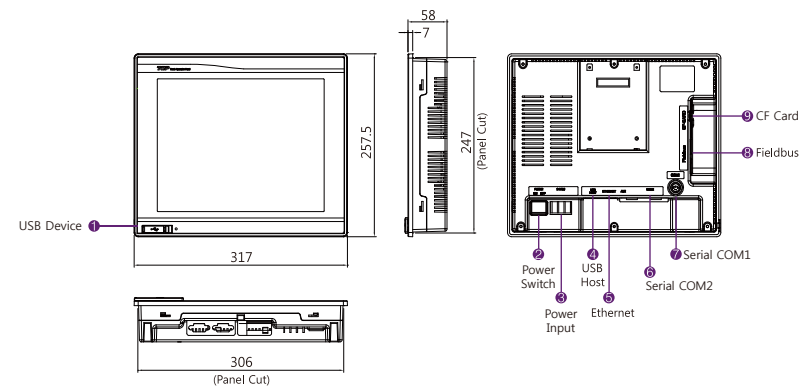


*Option



• Drawing

XTOP12TS-SD
XTOP12TS-SA



• Specifications

Functional		XTOP12TS-SD (DC)	XTOP12TS-SA (AC)
Display	Display Type	12.1" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	246x184.5	
	Resolution(dot)	800x600	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
Touch	Backlight Life	50,000 hours	
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
Interface	Resolution(Cell)	800x600	
	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: PS2 6pin or DSUB 9pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 9pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	
	Option Module	Fieldbus(Profibus, CC-Link)	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
Memory & Others	Screen Memory	26MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25℃)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP12TS-SD (DC)	XTOP12TS-SA (AC)
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	20W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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)	1500Vp-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)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
	Protection Classification	IP65	
	Panel Cut(mm)	306x247	
	External Dimension(mm)	317x257.5x58	
	Weight(kg)	2.5	
	Cooling System	Natural air circulation	
	Case Material	ABS(Resistance to flame)	

XTOP 10"

DC XTOP10TS-SD

AC XTOP10TS-SA

DC XTOP10TV-SD

AC XTOP10TV-SA



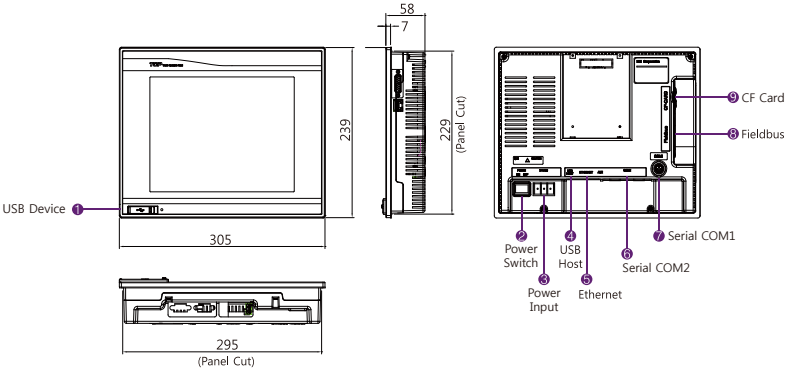
Drawing

XTOP10TS-SD

XTOP10TV-SD

XTOP10TS-SA

XTOP10TV-SA



Specifications

Functional		XTOP10TS-SD (DC) XTOP10TS-SA (AC)	XTOP10TV-SD (DC) XTOP10TV-SA (AC)
Display	Display Type	10.4" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	211.2x158.4	
	Resolution(dot)	800x600	640x480
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
Touch	Backlight Life	50,000 hours	
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
	Resolution(Cell)	800x600	640x480
	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: PS2 6pin or DSUB 9pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 9pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	
	Option Module	Fieldbus(Profibus, CC-Link)	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
Memory & Others	Screen Memory	26MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

XTOP 10"

DC XTOP10TV-ED-E

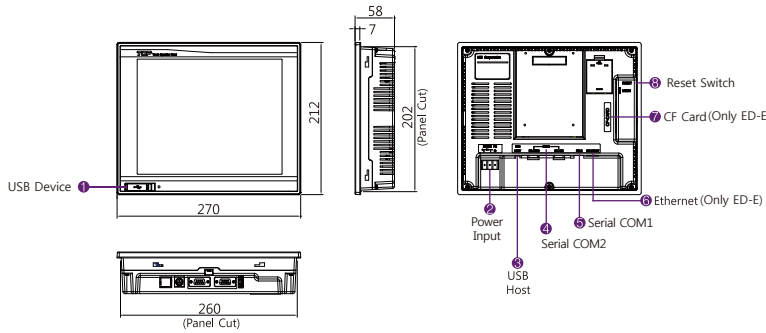
DC XTOP10TV-ED



Drawing

XTOP10TV-ED-E

XTOP10TV-ED



Specifications

Functional		XTOP10TV-ED-E	XTOP10TV-ED
Display	Display Type	10.4" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	211.2x158.4	
	Resolution(dot)	640x480	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
Touch	Backlight Life	50,000 hours	
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
	Resolution(Cell)	640x480	
	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: PS2 6pin or DSUB 9pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 9pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—
	Option Module	—	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	—
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
Memory & Others	Screen Memory	26MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP10TV-ED-E	XTOP10TV-ED
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	20W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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)	
Structure	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV	
	Shock Endurance	10G X,Y,Z each direction(for 3 times)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
	Protection Classification	IP65	
	Panel Cut(mm)	260x202	
	External Dimension(mm)	270x212x58	
	Weight(kg)	1.9	
	Cooling System	Natural air circulation	
	Case Material	ABS(Resistance to flame)	

XTOP 8"

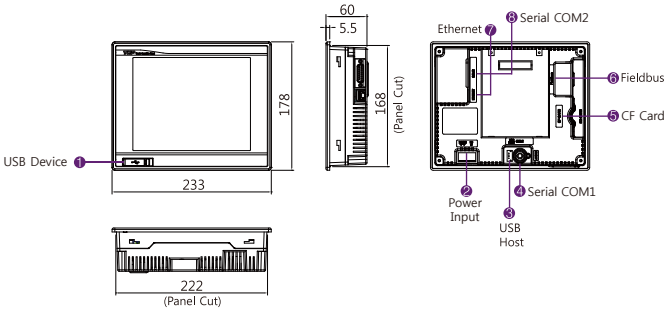
DC XTOP08TS-SD DC XTOP08TV-SD



*Option

Drawing

XTOP08TS-SD
XTOP08TV-SD



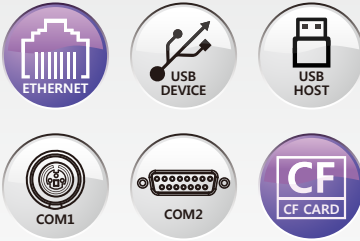
Specifications

Functional		XTOP08TS-SD	XTOP08TV-SD
Display	Display Type	8.4" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	170.9x128.2	
	Resolution(dot)	800x600	640x480
	Brightness Level	8 Level(by software)	
	Backlight Type	CCFL	
	Backlight Life	50,000 hours	
Touch	Touch Type	Analog resistive film	
	Resolution(Cell)	800x600	640x480
Interface	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: PS2 6pin or DSUB 15pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel	
	Ethernet	• IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	
	Option Module	Fieldbus(Profibus, CC-Link)	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
	Screen Memory	26MB	
Memory & Others	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
Memory & Others	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP08TS-SD	XTOP08TV-SD
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	15W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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 sF < 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)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
	Protection Classification	IP65	
Structure	Panel Cut(mm)	222x168	
	External Dimension(mm)	233x178x60	
	Weight(kg)	1.3	
	Cooling System	Natural air circulation	
Structure	Case Material	ABS(Resistance to flame)	

XTOP 8"

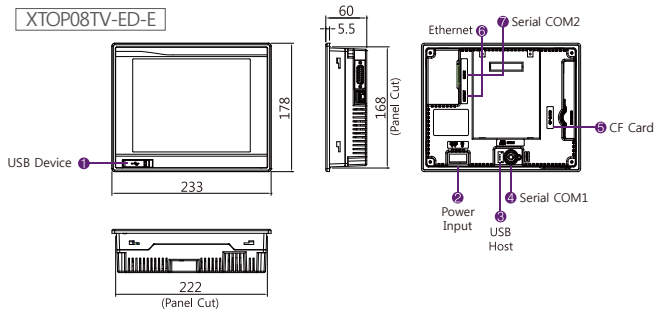
DC XTOP08TV-ED-E DC XTOP08TV-ED



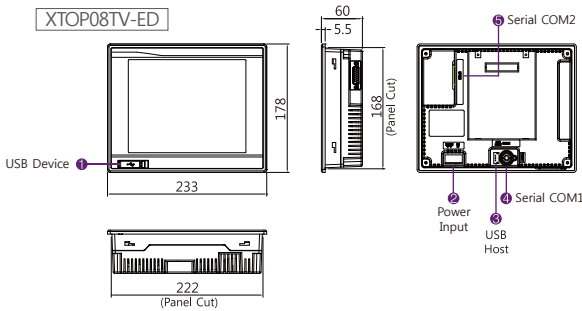
Only ED-E

Drawing

XTOP08TV-ED-E



XTOP08TV-ED



Specifications

Functional		XTOP08TV-ED-E	XTOP08TV-ED
Display	Display Type	8.4" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	170.9x128.2	
	Resolution(dot)	640x480	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
	Backlight Life	50,000 hours	
Touch	Touch Type	Analog resistive film	
	Resolution(Cell)	640x480	
Interface	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: PS2 6pin or DSUB 15pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel	
	Ethernet	• IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	
	Option Module	—	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel(FAT16/FAT32)	
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
	Screen Memory	26MB	
Memory & Others	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP08TV-ED-E	XTOP08TV-ED
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	15W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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 sF < 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)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
	Protection Classification	IP65	
Structure	Panel Cut(mm)	222x168	
	External Dimension(mm)	233x178x60	
	Weight(kg)	1.3	
	Cooling System	Natural air circulation	
Structure	Case Material	ABS(Resistance to flame)	

XTOP 5"

DC XTOP05TQ-SD

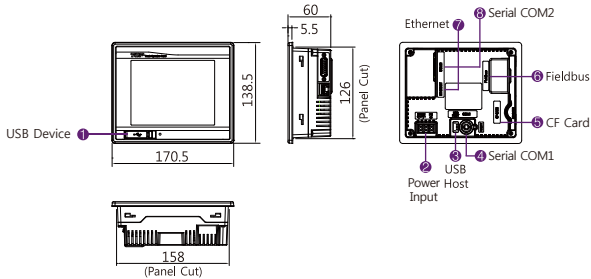


*Option



• Drawing

XTOP05TQ-SD



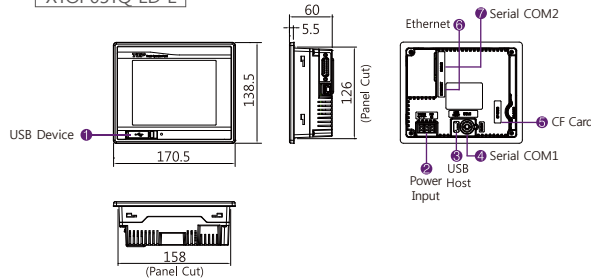
• Specifications

Functional		XTOP05TQ-SD
Display	Display Type	5.7" TFT Color
	Color	65,536 Color
	Display Area(mm)	115.2x86.4
	Resolution(dot)	320x240
	Brightness Level	8 Level(by software)
	Backlight Type	LED
	Backlight Life	50,000 hours
Touch	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible
	Touch Type	Analog resistive film
	Resolution(Cell)	320x240
	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: PS2 6pin or DSUB 15pin 1 Channel
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel
	Option Module	Fieldbus(Profibus, CC-Link) V1.1 Compatible 1 Channel, Max 5m
	USB Device	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32)
	USB Host	• USB Barcode/USB Scanner(Standard Keyboard Protocol)
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port
	Screen Memory	26MB
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe
Memory & Others	Backup Period	5 years(with rechargeable, ambient temperature 25°C)
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input
	Real Time Clock	Built in
	Status LED	Built in

General		XTOP05TQ-SD
Power	Input Voltage	DC24V(20~28V)
	Power Consumption	12W or less
	Voltage Sag	24V, Within 10ms
	Insulation Resistance	500V DC, 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)
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV
	Shock Endurance	10G X,Y,Z each direction(for 3 times)
	Surge Voltage	500V(Line-Line)
	Ground Connection	Class 3(100Ω under)
Structure	Protection Classification	IP65
	Panel Cut(mm)	158x126
	External Dimension(mm)	170.5x138.5x60
	Weight(kg)	0.7
	Cooling System	Natural air circulation
	Case Material	ABS(Resistance to flame)

• Drawing

XTOP05TQ-ED-E



• Specifications

Functional		XTOP05TQ-ED-E	XTOP05TQ-ED
Display	Display Type	5.7" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	115.2x86.4	
	Resolution(dot)	320x240	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
	Backlight Life	50,000 hours	
Touch	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
	Resolution(Cell)	320x240	
	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: PS2 6pin or DSUB 15pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—
	Option Module	Fieldbus(Profibus, CC-Link) V1.1 Compatible 1 Channel, Max 5m	
	USB Device	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32)	
	USB Host	• USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	—
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
	Screen Memory	6MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
Memory & Others	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP05TQ-ED-E	XTOP05TQ-ED
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	12W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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)	
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV	
	Shock Endurance	10G X,Y,Z each direction(for 3 times)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
Structure	Protection Classification	IP65	
	Panel Cut(mm)	158x126	
	External Dimension(mm)	170.5x138.5x60	
	Weight(kg)	0.7	
	Cooling System	Natural air circulation	
	Case Material	ABS(Resistance to flame)	

XTOP 5"

DC XTOP05TQ-ED-E DC XTOP05TQ-ED

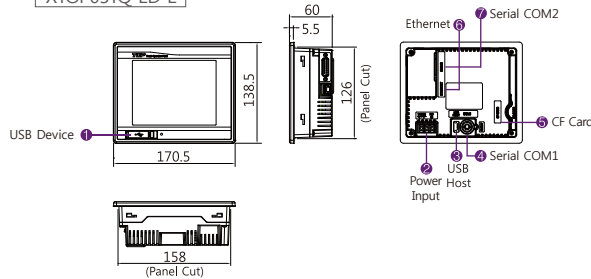


Only ED-E



• Drawing

XTOP05TQ-ED-E



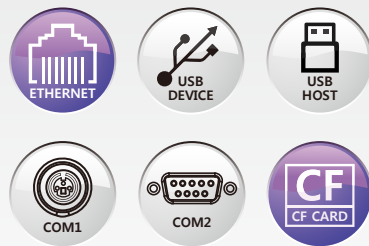
• Specifications

Functional		XTOP05TQ-ED-E	XTOP05TQ-ED
Display	Display Type	5.7" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	115.2x86.4	
	Resolution(dot)	320x240	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
	Backlight Life	50,000 hours	
Touch	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
	Touch Type	Analog resistive film	
	Resolution(Cell)	320x240	
	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: PS2 6pin or DSUB 15pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—
	Option Module	Fieldbus(Profibus, CC-Link) V1.1 Compatible 1 Channel, Max 5m	
	USB Device	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32)	
	USB Host	• USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel (FAT16/FAT32)	—
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
	Screen Memory	6MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
Memory & Others	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP05TQ-ED-E	XTOP05TQ-ED
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	12W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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)	
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV	
	Shock Endurance	10G X,Y,Z each direction(for 3 times)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
Structure	Protection Classification	IP65	
	Panel Cut(mm)	158x126	
	External Dimension(mm)	170.5x138.5x60	
	Weight(kg)	0.7	
	Cooling System	Natural air circulation	
	Case Material	ABS(Resistance to flame)	

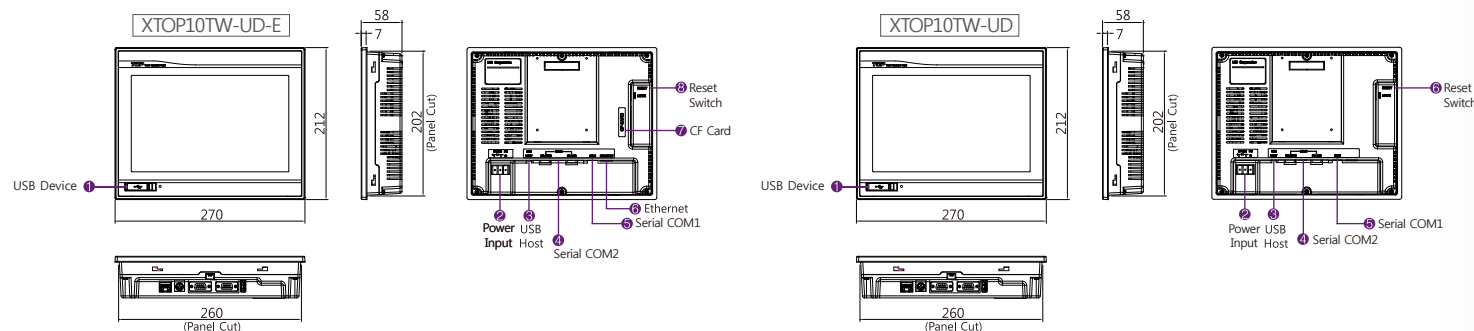
XTOP 10 "

DC XTOP10TW-UD-E DC XTOP10TW-UD



Only UD-E

• Drawing



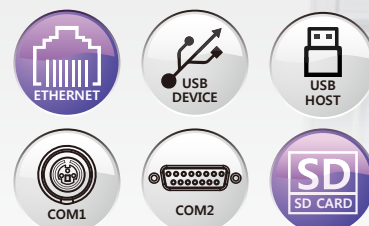
• Specifications

Functional		XTOP10TW-UD-E	XTOP10TW-UD
Display	Display Type	10.2" TFT Color	
	Color	65,536 Color	
	Display Area(mm)	222x132.48	
	Resolution(dot)	800x480	
	Brightness Level	8 Level(by software)	
	Backlight Type	LED	
	Backlight Life	50,000 hours	
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	
Touch	Touch Type	Analog resistive film	
	Resolution(Cell)	800x480	
	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: PS2 6pin or DSUB 9pin 1 Channel	
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 9pin 1 Channel	
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—
	Option Module	—	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)	
	CF Card	CF Card(Type-II) Slot 1 Channel(FAT16/FAT32)	—
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port	
	Screen Memory	26MB	
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	
Memory & Others	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power 30 days backup without power input) • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	
	Real Time Clock	Built in	
	Status LED	Built in	

General		XTOP10TW-UD-E	XTOP10TW-UD
Power	Input Voltage	DC24V(20~28V)	
	Power Consumption	20W or less	
	Voltage Sag	24V, Within 10ms	
	Insulation Resistance	500V DC, 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: 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)	
	Surge Voltage	500V(Line-Line)	
	Ground Connection	Class 3(100Ω under)	
Structure	Protection Classification	IP65	
	Panel Cut(mm)	260x202	
	External Dimension(mm)	270x212x58	
	Weight(kg)	1.9	
	Cooling System	Natural air circulation	
	Case Material	ABS(Resistance to flame)	

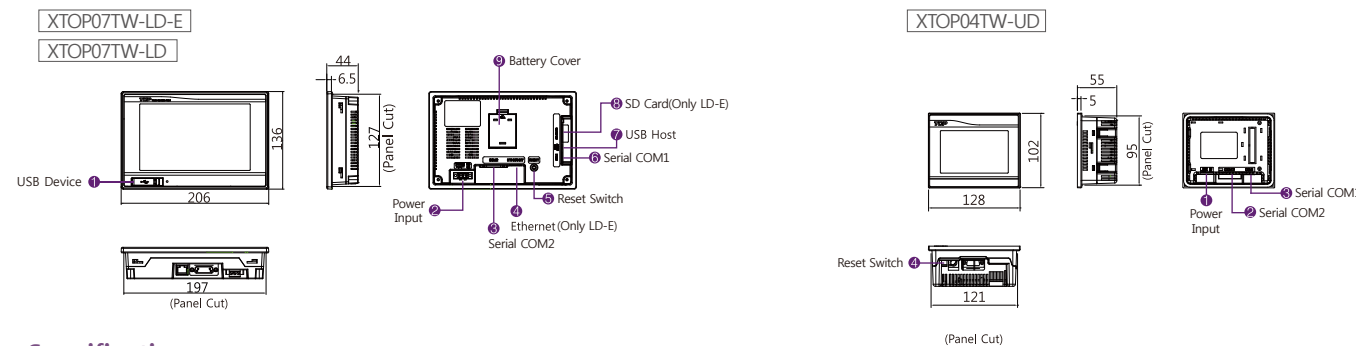
XTOP 7 "

DC XTOP07TW-LD-E DC XTOP07TW-LD



Only LD-E

• Drawing



• Specifications

Functional		XTOP07TW-LD-E	XTOP07TW-LD	XTOP04TW-UD
Display	Display Type	7" TFT Color		4.3" TFT Color
	Color	65,536 Color		—
	Display Area(mm)	152.4x91.5		95.04x52.86
	Resolution(dot)	800x480		480x272
	Brightness Level	8 Level(by software)		—
	Backlight Type	LED		—
	Backlight Life	50,000 hours		—
	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible		—
Touch	Touch Type	Analog resistive film		—
	Resolution(Cell)	800x480		480x272
	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: PS2 6pin 1 Channel		—
	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: 2400~115.2k, 187.5kbps(MPI Direct) • Connector: DSUB 15pin 1 Channel		• Connector: DSUB 9pin 1 Channel
	Ethernet	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—	
	Option Module	—		—
	USB Device	V1.1 Compatible 1 Channel, Max 5m, USB gender option		—
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible(FAT16/FAT32) • USB Barcode/USB Scanner(Standard Keyboard Protocol)		—
	SD Card	MMC/SD Card Slot 1 Channel(FAT16/FAT32)		—
	Printer	Roll Printer(EPSON protocol): RS-232C, COM1 port		—
	Screen Memory	26MB		6MB
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe		—
Memory & Others	Backup Period	5 years(with rechargeable, ambient temperature 25°C)		—
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input		—
	Real Time Clock	Built in		—
	Status LED	Built in		—

General		XTOP07TW-LD-E	XTOP07TW-LD	XTOP04TW-UD
Power	Input Voltage	DC24V(20~28V)		—
	Power Consumption	12W or less		10W or less
	Voltage Sag	24V, Within 10ms		—
	Insulation Resistance	500V DC, 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: 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)		—
	Surge Voltage	500V(Line-Line)		—
	Ground Connection	Class 3(100Ω under)		—
Structure	Protection Classification	IP65		—
	Panel Cut(mm)	197x127		121x95
	External Dimension(mm)	206x136x44		128x102x55
	Weight(kg)	0.7		0.4
	Cooling System	Natural air circulation		—
	Case Material	ABS(Resistance to flame)		—

HTOP 5 "(Wireless)

HTOP05TV-SD-W2 HTOP05TQ-SD-W2

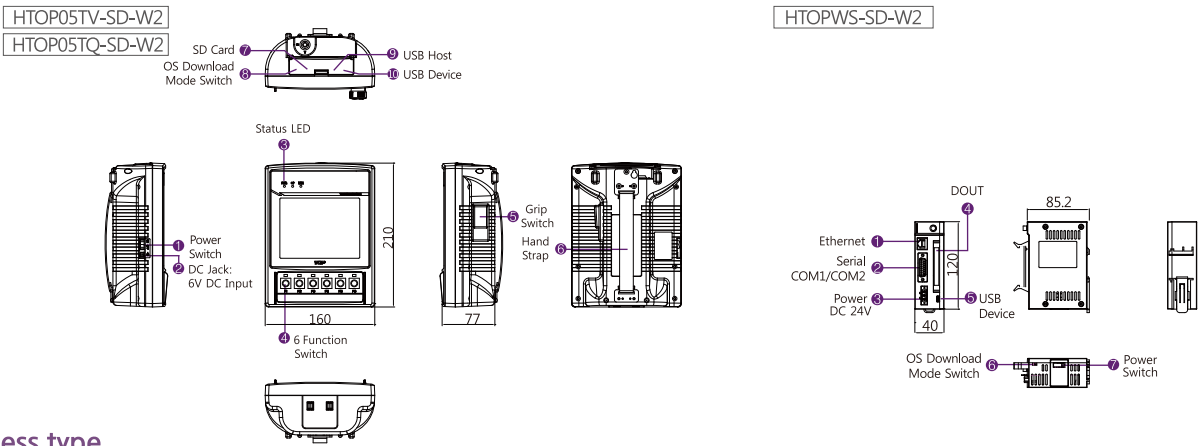


Specifications

Functional	HTOP05TV-SD-W2	HTOP05TQ-SD-W2	HTOPWS-SD-W2 (W-Station)
Display	Display Type	5.7" TFT Color	—
	Color	65,536 Color	—
	Display Area(mm)	115.2x86.4	—
	Resolution(dot)	640x480	320x240
	Brightness Level	8 Level(by software)	—
	Backlight Type	LED	—
	Backlight Life	50,000 hours	—
Touch	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	—
	Touch Type	Analog resistive film	—
	Resolution(Cell)	640x480	320x240
Interface	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 15pin 1 Channel
	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 15pin 1 Channel
	Ethernet	—	• IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel
	Wireless Ethernet	WLAN Standard: IEEE802.11 b/g/n	
	USB Device	V1.1 Compatible 1 Channel, Max 5m	
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible (FAT16/FAT32)	—
	SD Card	MMC/SD Card Slot 1 Channel (FAT16/FAT32)	—
	Contact Switch	Keylock: 1A, 3-Position enabling (OFF-ON-OFF)	—
	Function Switch	6P: Function Key or Output (TTL Level Output)	—
	Contact	—	• 1A-1B Key switch, DC24V/0.5A • 2bit 3-Position enabling, DC24V/0.5A • 6bit Digital output, DC24V/0.5A • Alive output, DC24V/0.5A
Memory & Others	Screen Memory	26MB	—
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	—
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	—
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	—
	Real Time Clock	Built in	—
	Status LED	• Wireless ethernet LINK • System operation OP • Power PWR	• Serial COM1/COM2 RX, TX • Wireless ethernet LINK • System operation OP • Power PWR

General	HTOP05TV-SD-W2	HTOP05TQ-SD-W2	HTOPWS-SD-W2 (W-Station)
Power	Input Voltage	2 Cell Li+ 3.7V 5000mAh Rechargeable battery, Charging: Min 4 hours, Running: Max 5 hours	DC24V(20~28V)
	Additional Input Voltage	AC adapter 6V DC(2A)	—
	Power Consumption	10W or less	—
	Voltage Sag	24V, Within 10ms	—
	Insulation Resistance	—	500V DC, 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: 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)
	Surge Voltage	—	500V(Line-Line)
	Ground Connection	—	Class 3(100Ω or less)
Structure	External Dimension(mm)	160x210x77	40x120x85.2
	Weight(kg)	0.9(with battery)	0.2
	Fixed Method	Cradle type	Standard DIN Rail
	Cooling System	Natural air circulation	—
	Case Material	PC/ABS (Resistance to flame)	ABS (Resistance to flame)

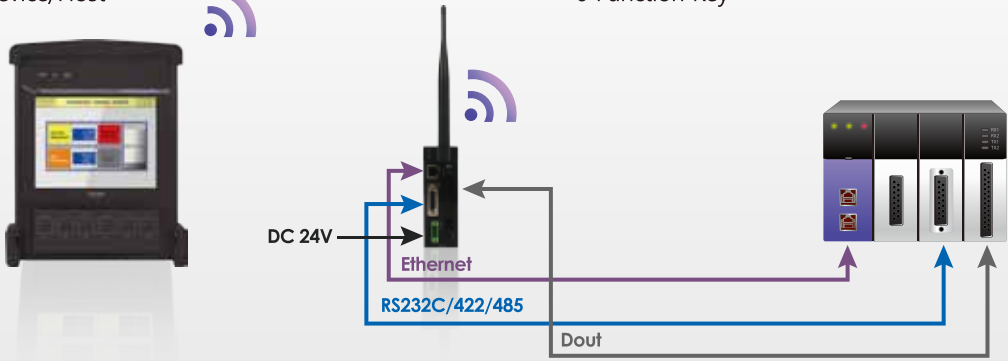
Drawing



Wireless type

- Communication
- Extended Memory
- Extended Switch
- High-Capacity Battery

- Serial (RS232C/422/485)
- Ethernet
- USB Device/Host
- SD Card for data management
- Key-Lock Switch
- 3-Position Switch
- 6 Function Key
- 4 hours continuous use



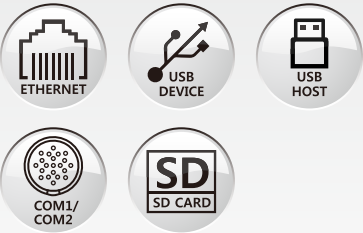
W-Station

HTOPWS-SD-W2



HTOP 5 "(Wired)

HTOP05TV-SD2 HTOP05TQ-SD2



W-Station

HTOPWS-SD

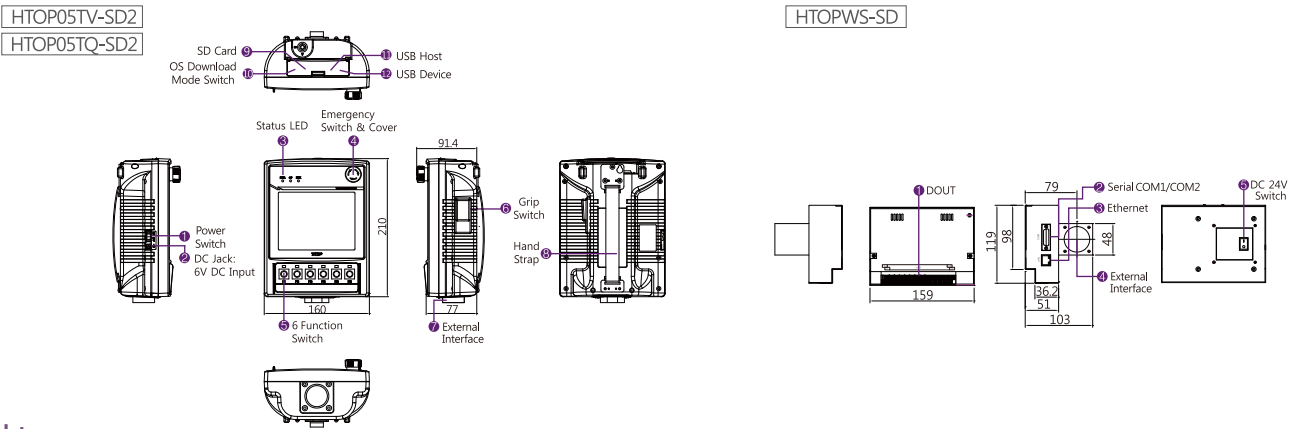


Specifications

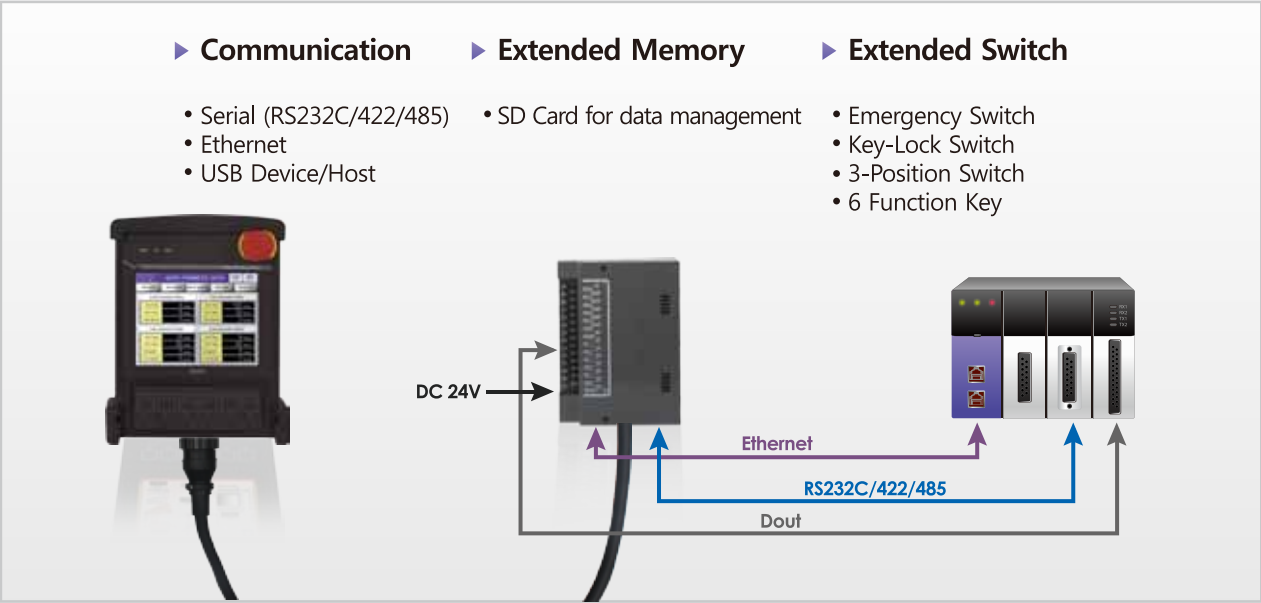
Functional	HTOP05TV-SD2	HTOP05TQ-SD2	HTOPWS-SD (W-Station)
Display	Display Type	5.7" TFT Color	—
	Color	65,536 Color	—
	Display Area(mm)	115.2x86.4	—
	Resolution(dot)	640x480	320x240
	Brightness Level	8 Level(by software)	—
	Backlight Type	LED	—
	Backlight Life	50,000 hours	—
Touch	Display Font	6x6/8x8/12x12/8x16/16x16/32x32 dot, MS Windows font possible	—
	Touch Type	Analog resistive film	—
	Resolution(Cell)	640x480	320x240
Interface	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: Circular 37pin 1 Channel	—
	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: Circular 37pin 1 Channel	—
	Ethernet	• IEEE802.3/IEEE802.3u, 10BASE-T/100BASE-TX • Connector: RJ-45 1 Channel	—
	USB Device	V1.1 Compatible 1 Channel, Max 5m	—
	USB Host	• Output 5V/0.5A, USB Storage V1.0 Compatible (FAT16/FAT32) • USB Barcode/USB Scanner (Standard Keyboard Protocol)	—
	SD Card	MMC/SD Card Slot 1 Channel (FAT16/FAT32)	—
	Contact Switch	Keylock : 1A, Emergency Stop : 1A-2B, 3-Position enabling (OF-ON-OFF)	—
	Function Switch	6P: Function Key or Output (TTL Level Output)	—
	Contact	—	• 1A-1B Key switch, DC24V/0.5A • 1A-2B Emergency stop switch, DC24V/0.5A • 2bit 3-Position enabling, DC24V/0.5A • 6bit Digital output, DC24V/0.5A
Memory & Others	Screen Memory	26MB	—
	Backup Memory	• 512KB: System buffer(5K Word), Including Alarm/Logging/Recipe	—
	Backup Period	5 years(with rechargeable, ambient temperature 25°C)	—
	Battery	• Lithium rechargeable: Main, Charging is completed in one day (when power input), 30 days backup without power input • Coin type Lithium: Subsidiary(changeable), 2 years backup without power input	—
	Real Time Clock	Built in	—
	Status LED	• Wireless ethernet LINK • System operation OP • Power PWR	—

General	HTOP05TV-SD2	HTOP05TQ-SD2	HTOPWS-SD (W-Station)
Power	Input Voltage	DC24V(20~28V)	—
	Additional Input Voltage	AC adapter 6V DC(2A)	—
	Power Consumption	10W or less	—
	Voltage Sag	24V, Within 10ms	—
	Insulation Resistance	—	500V DC, 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)	—
	Static Electricity Discharge	Connective discharge from EN61000-4-2: ±4kV	—
	Shock Endurance	10G X,Y,Z each direction(for 3 times)	—
	Surge Voltage	500V(Line-Line)	—
	Ground Connection	—	Class 3(100Q or less)
Structure	External Dimension(mm)	160x210x77	159x119x103
	External Dimension(mm) (including the protection bumper)	176x219.7x92.5	—
	Weight(kg)	0.9(with battery)	0.9
	Fixed Method	Hanger type	Standard DIN Rail
	Cooling System	Natural air circulation	—
	Case Material	PC/ABS V8-1401 (Resistance to flame)	Steel/Painting

Drawing



Wired type

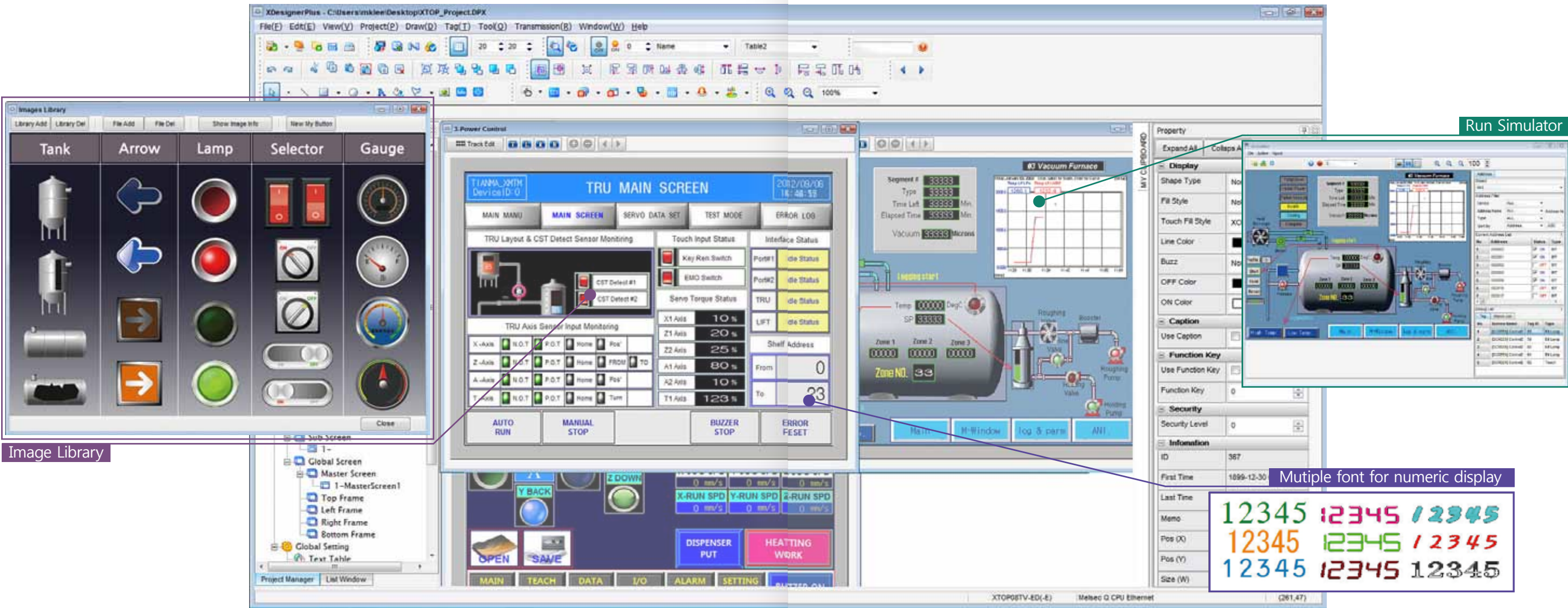


XDesignerPlus



Multi-functional software - Easy to design

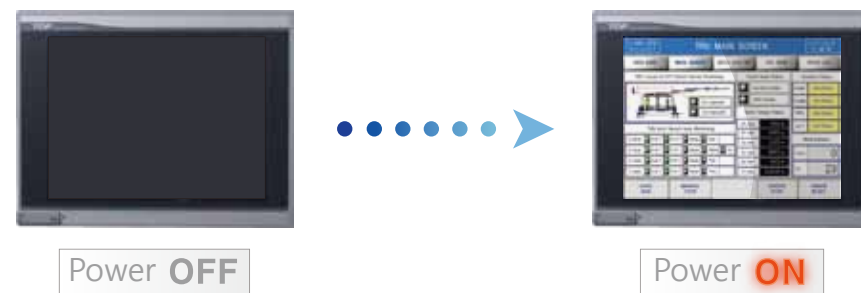
- **Compatibility**
 - Available to Install on any version of Windows.
 - Use a project file designed by previous versions of software.
- **Language Selection**
 - You can select a language in your software. (Korean, English, Chinese, Japanese, Arabic, Polish)
 - Various languages for the UI of software. (Korean, English, Chinese, Japanese, Arabic, Polish)
- **OS Upgrade tool**
 - If your XTOP's OS version is lower than XDesignerPlus installed on your computer, the software automatically launch an upgrade tool when you transfer a project file.
- **Simulation**
 - Running the simulator can help you to debug your project with a list of address you use.
- **Various fonts for numeric data**
 - Bitmap fonts, image fonts (MS Windows fonts) are supported for displaying numeric data.
- **Upgraded Transmitter**
 - Automatic progress of Project build - Transmission - Closing Transmitter .
 - Function of 'Transferring changed data only' is available.



1. Outstanding Speed

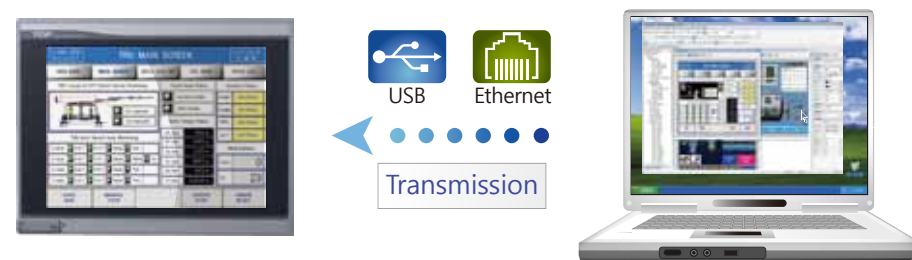
Best

Boot speed



Best

Transmission speed of design data



Reduction of design process by fast editing

- ▶ Various and fast editing functions **Best**
- ▶ Simple organization of object arrange and size
- ▶ Global screen for common functions



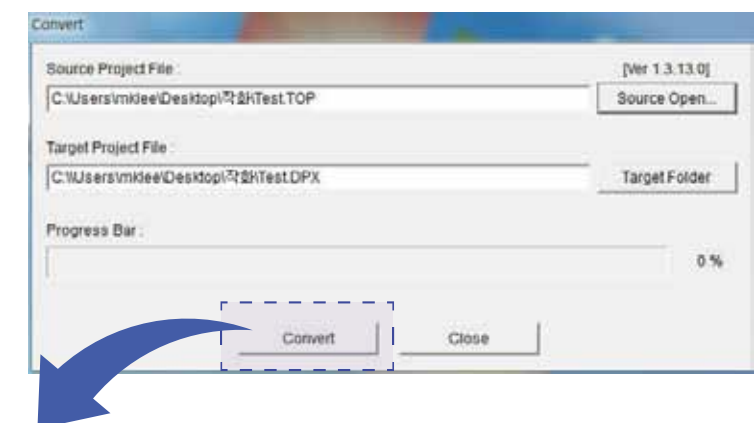
Automatic screen change

- ▶ Project adjusting through resolution by model change



Converting project file from previous version

- ▶ Project converting program from previous model's file



TOP, XOP files to **DPX files**

2. Convenient Maintenance, Security, Inspection

Maintenance with USB memory

- Simple maintenance by USB memory, without PC



Security settings

- Password – Total 15 levels
- Both 'direct input of password' / 'using device indirect data(can be changed during the operation)' are Available. Time setting for Log-in
- Holding refresh time of password is available.



PASS THROUGH

- Debugging PLC connected with TOP by PASS THROUGH



Remote control by TOPView

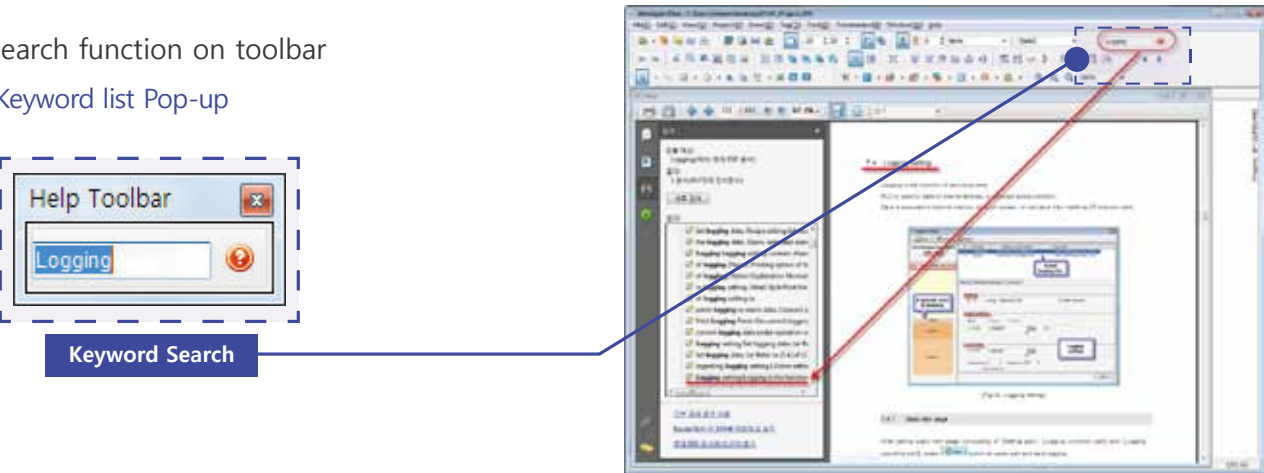
- Field monitoring/control in office by PC connected with Ethernet



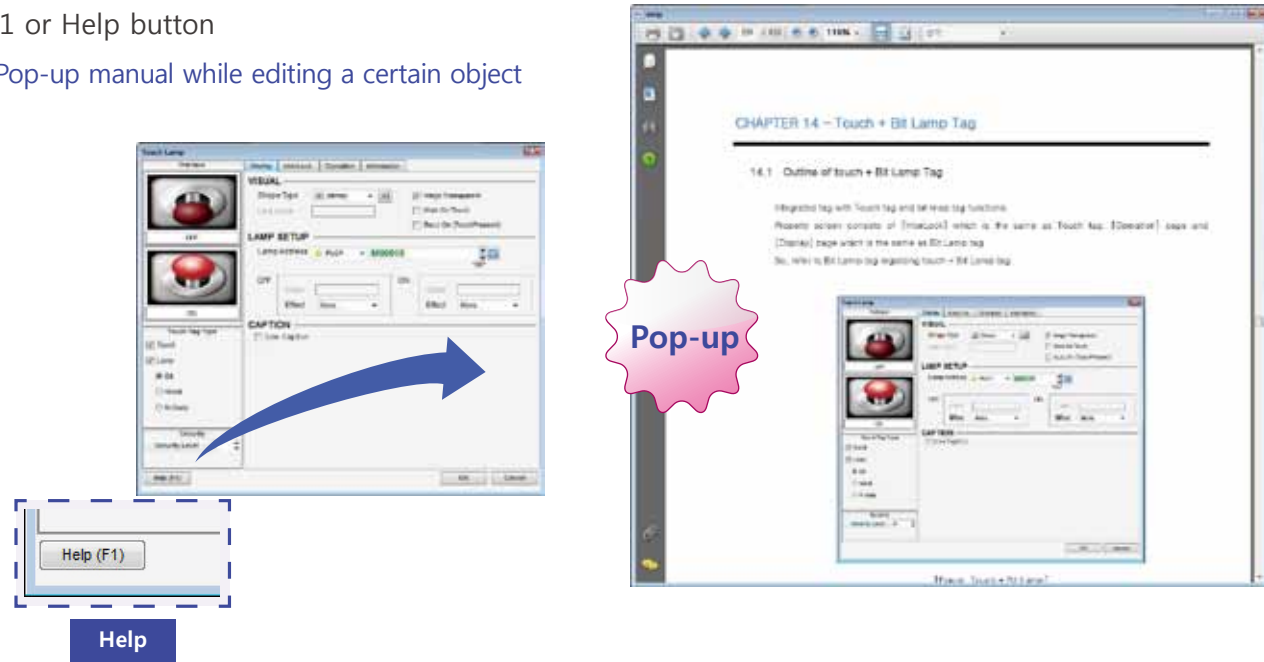
3. Easy and fast solution system

Search by user request

- Search function on toolbar
- : Keyword list Pop-up

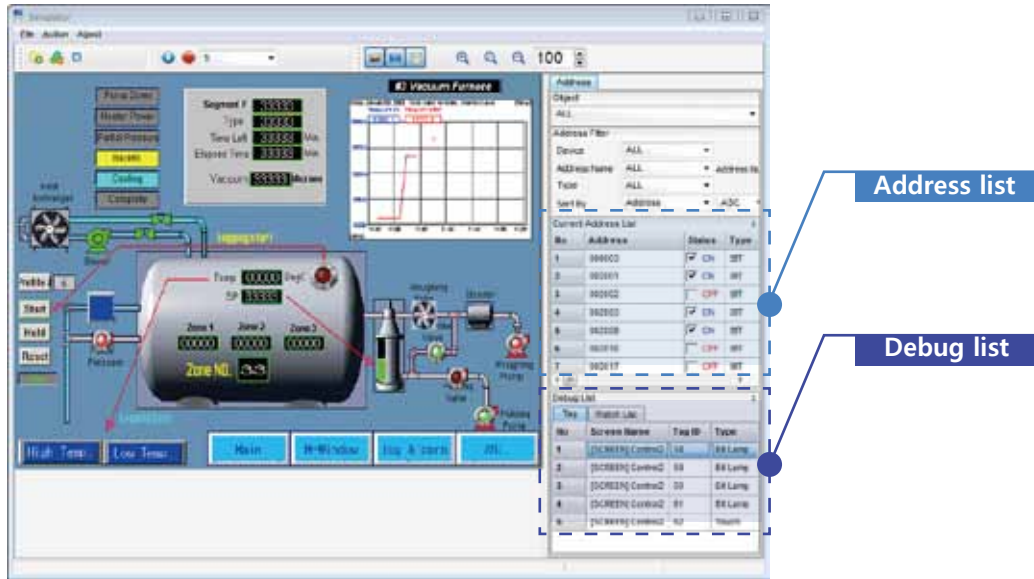


- F1 or Help button
- : Pop-up manual while editing a certain object



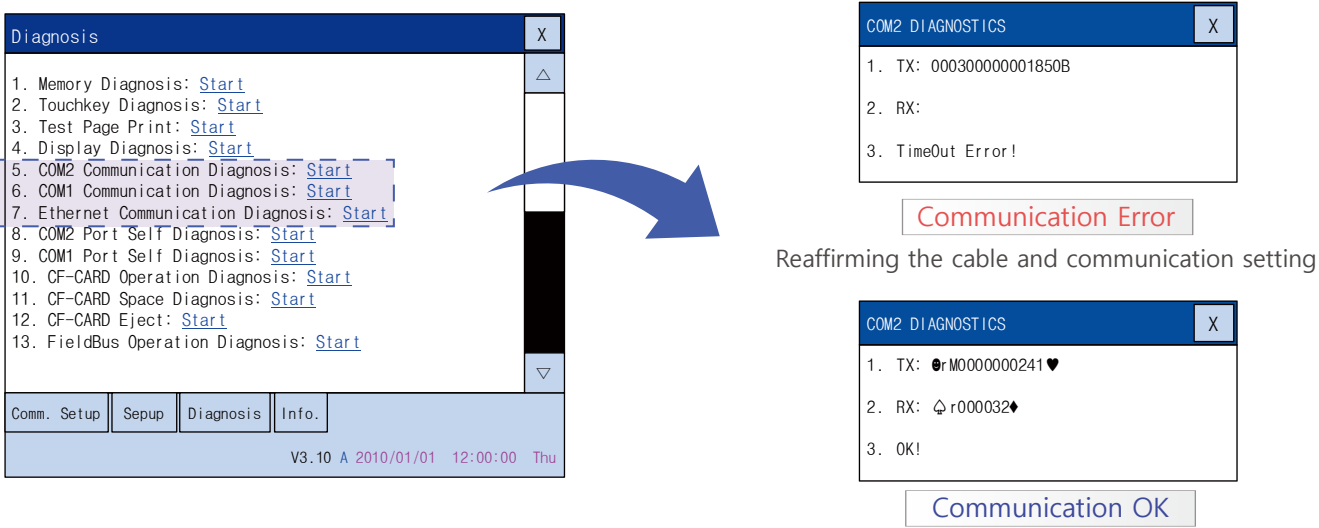
Simulation

- Debugging and running available in PC, without TOP and PLC



Communication diagnostics

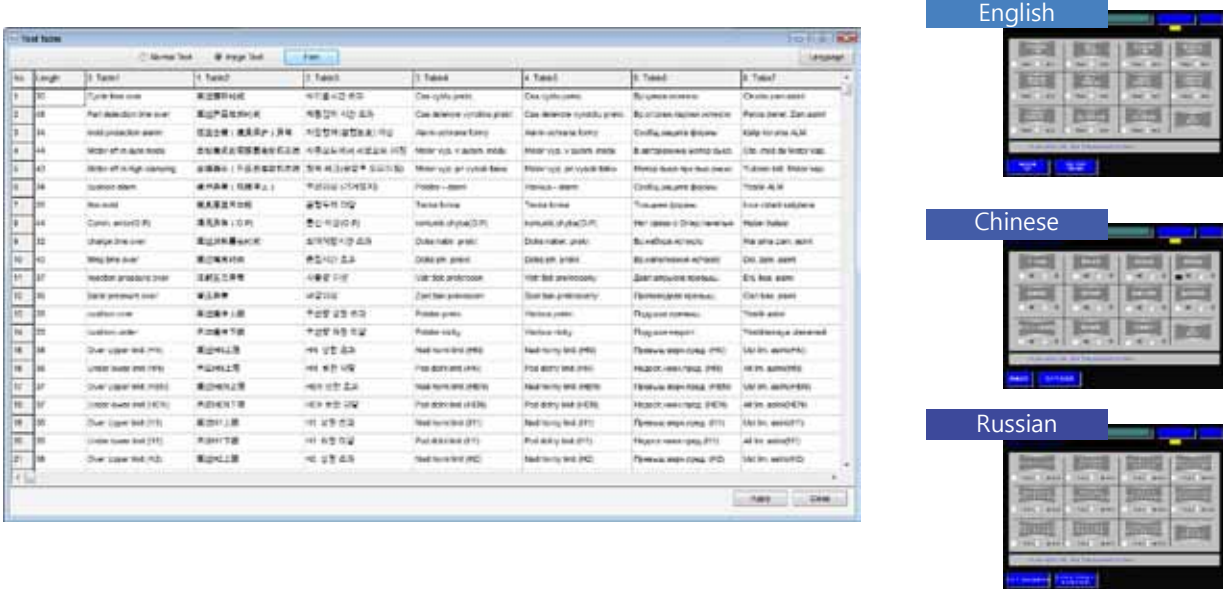
- Simple checking of communication with PLC in TOP's main menu



4. Powerful functions with multiple usability

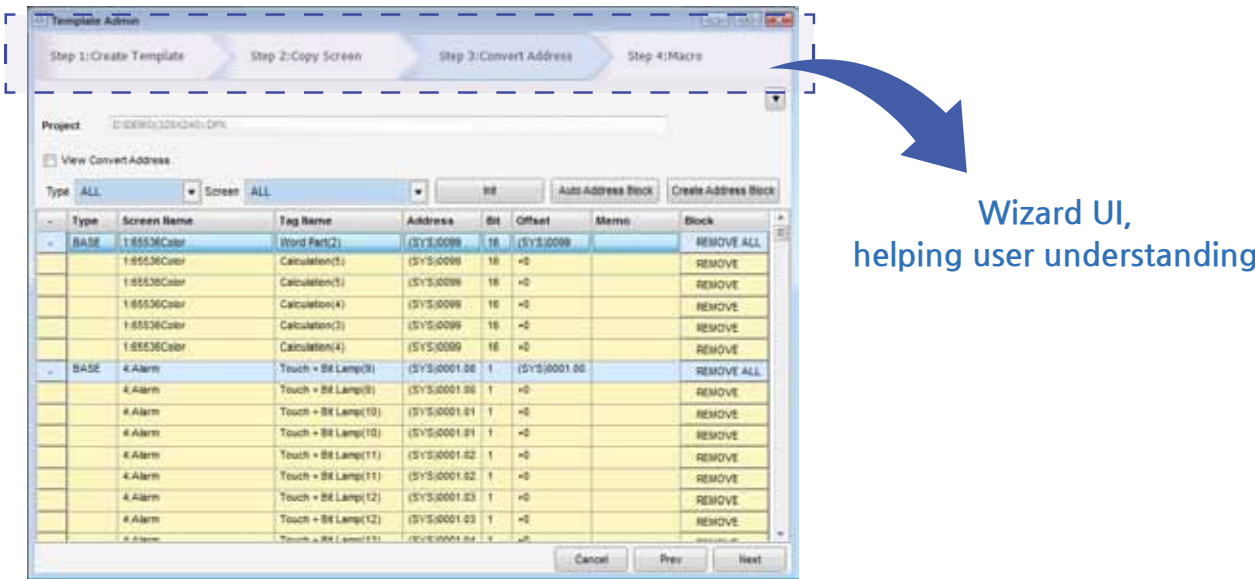
Multi language support

- ▶ Using text table function to change the languages during run mode



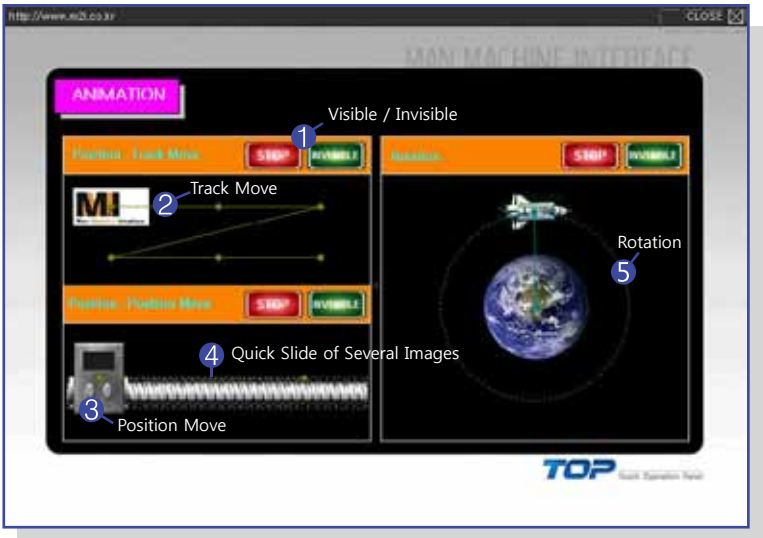
Template function

- ▶ Using template, make common used project more simply
 - ✓ By offset of addresses in project, auto-completion support
 - ✓ Set certain property of one object, and macro function support multi-create
 - ✓ Edit captions and properties of objects in one time on grid



Dynamic animation

- ▶ Visible/Invisible, Move, Rotate, Slide function

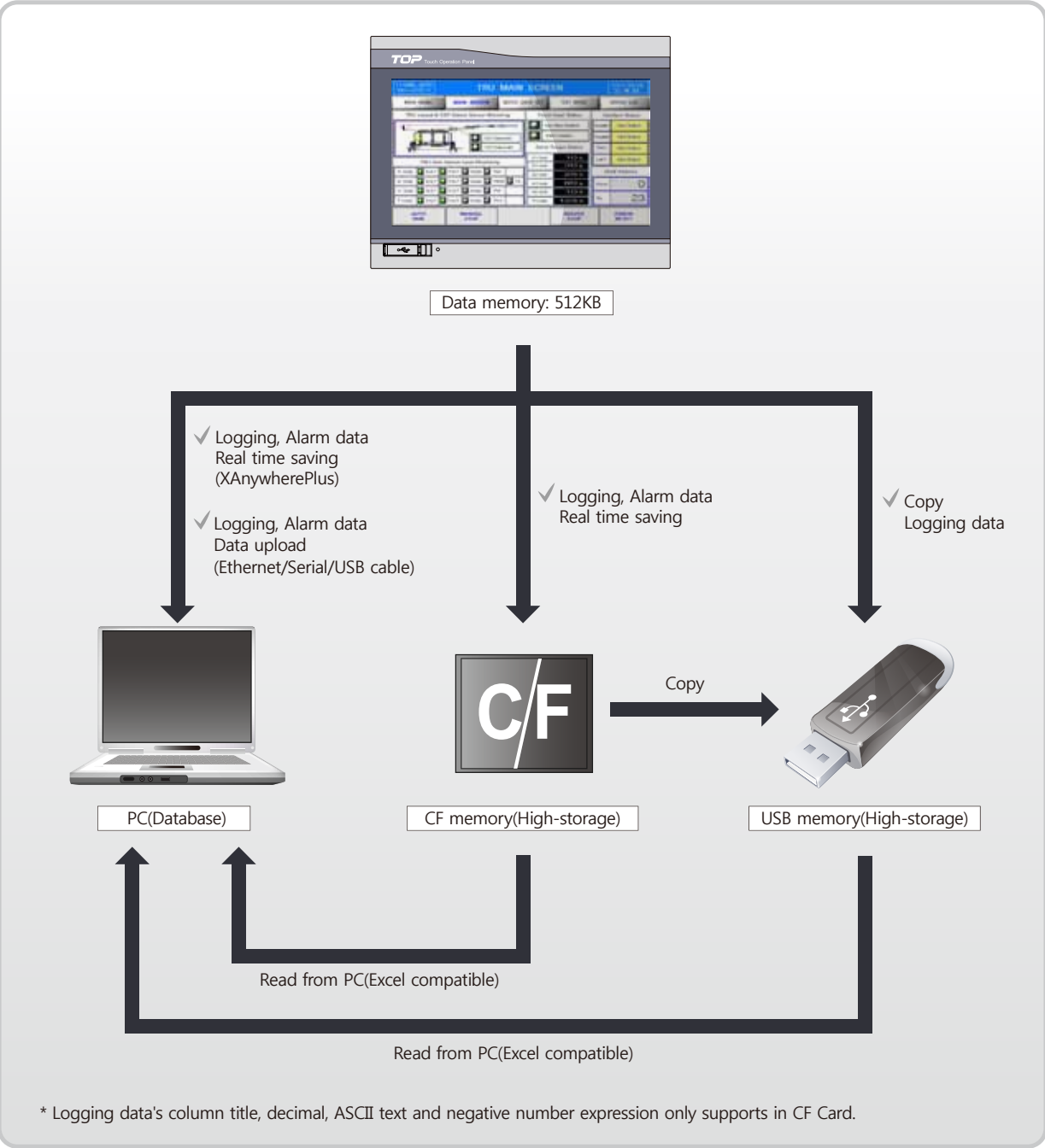


- 1 Visible/Invisible
- 2 Track Move
- 3 Position Move
- 4 Quick slide of several images
- 5 Rotation



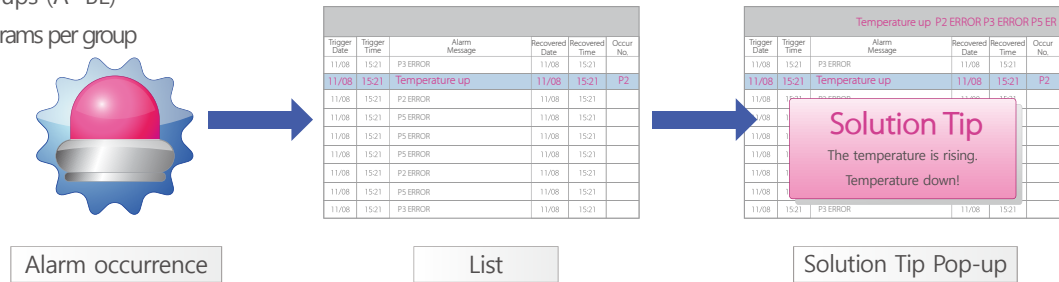
5. Alarm/Logging/Recipe

Data management diagram



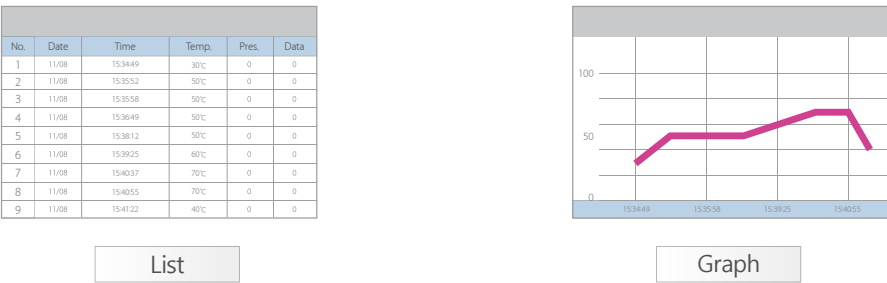
Alarm

- ▶ Register the errors occurred in machine, and display in various ways
 - ✓ Register alarms
 - ✓ 64 Groups (A~BL)
 - ✓ 5,000 Alarms per group



Logging

- ▶ Real-time saving of PLC data

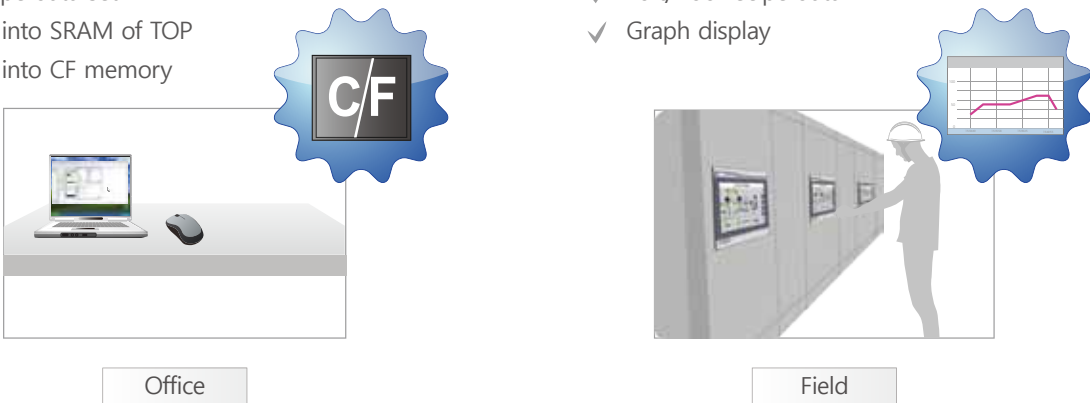


Recipe

- ▶ Adopting data blocks set in office, to operating field

- ✓ Recipe data set
- ✓ Save into SRAM of TOP
- ✓ Save into CF memory

- ✓ Edit/Add recipe data
- ✓ Graph display



Data Management Software

XAnywherePlus



Download in M2I's homepage now.

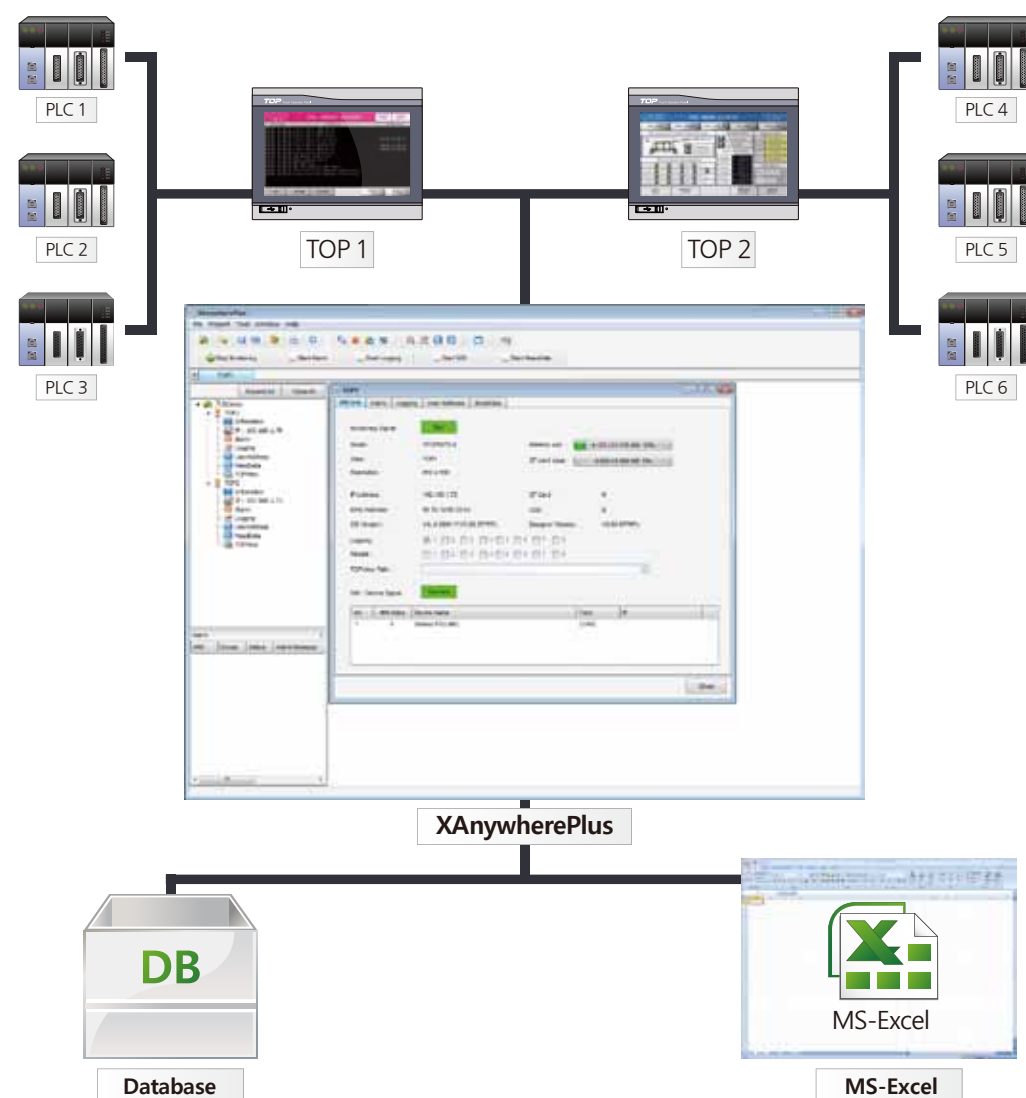
www.m2i.co.kr

Managing data made in *TOP*

- **Real-time save**
Saving the Logging and Alarm data into PC's Database by Ethernet
- **Saved data**
Search by Month/Day/Hour
- **DDE(Dynamic Data Exchange)**
Interlock PLC data with excel

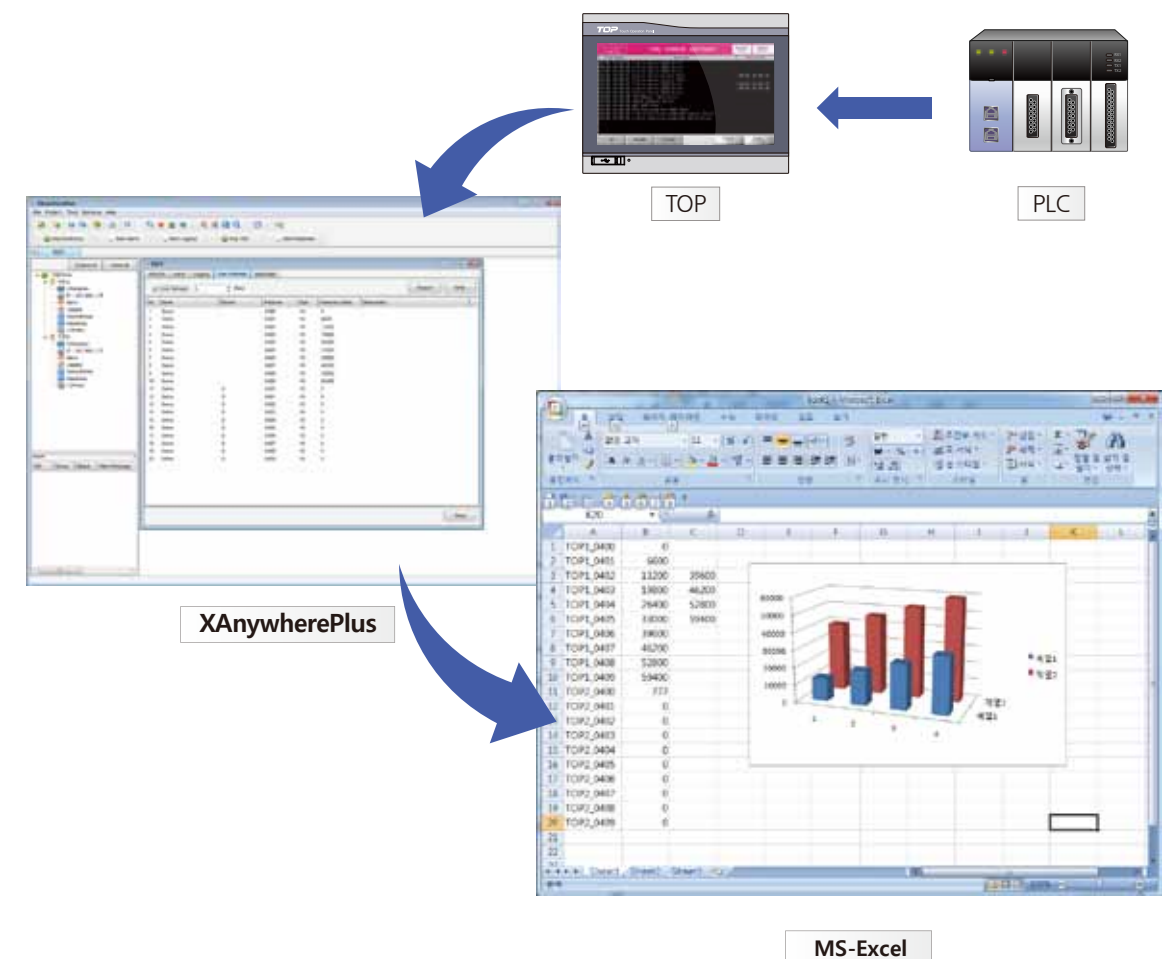
- **TOPView**
Remote monitor and control
- **Trigger/Event**
Control TOP data in diverse situation
- **Collect Mass Data**
Collect and save data from multiple TOPs into a PC

Diagram



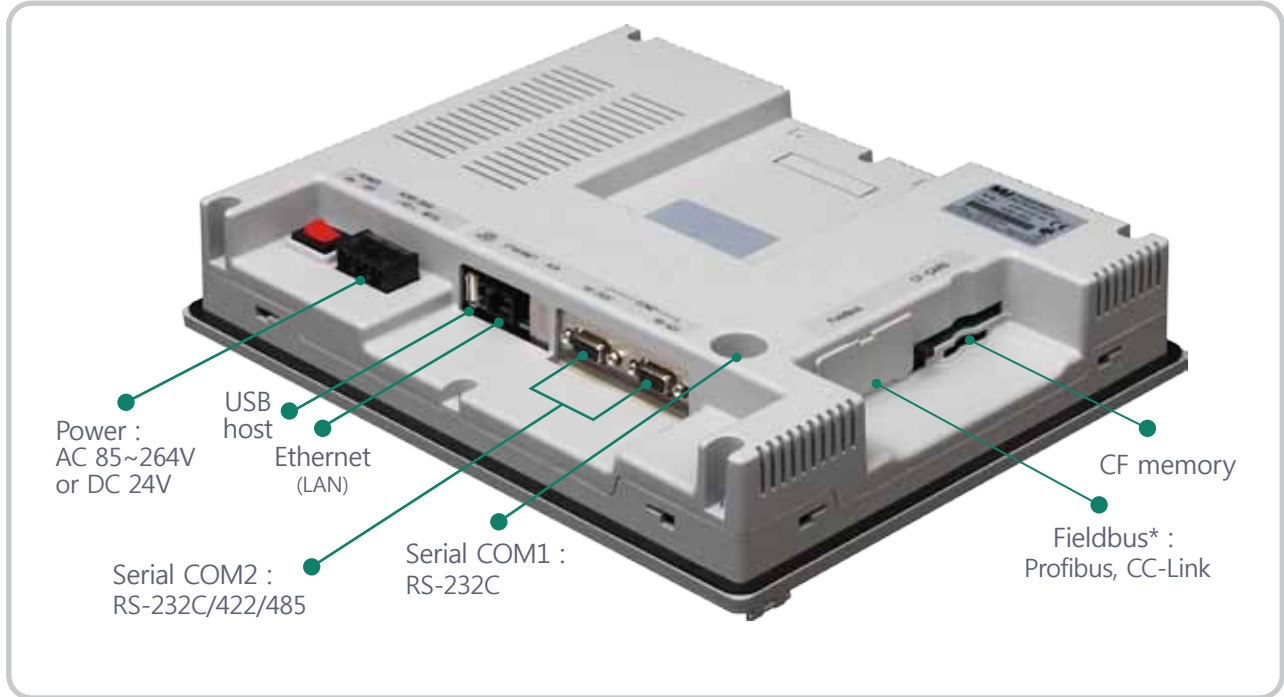
DDE(Dynamic Data Exchange) function

XAnywherePlus supports interlock the PLC data with excel

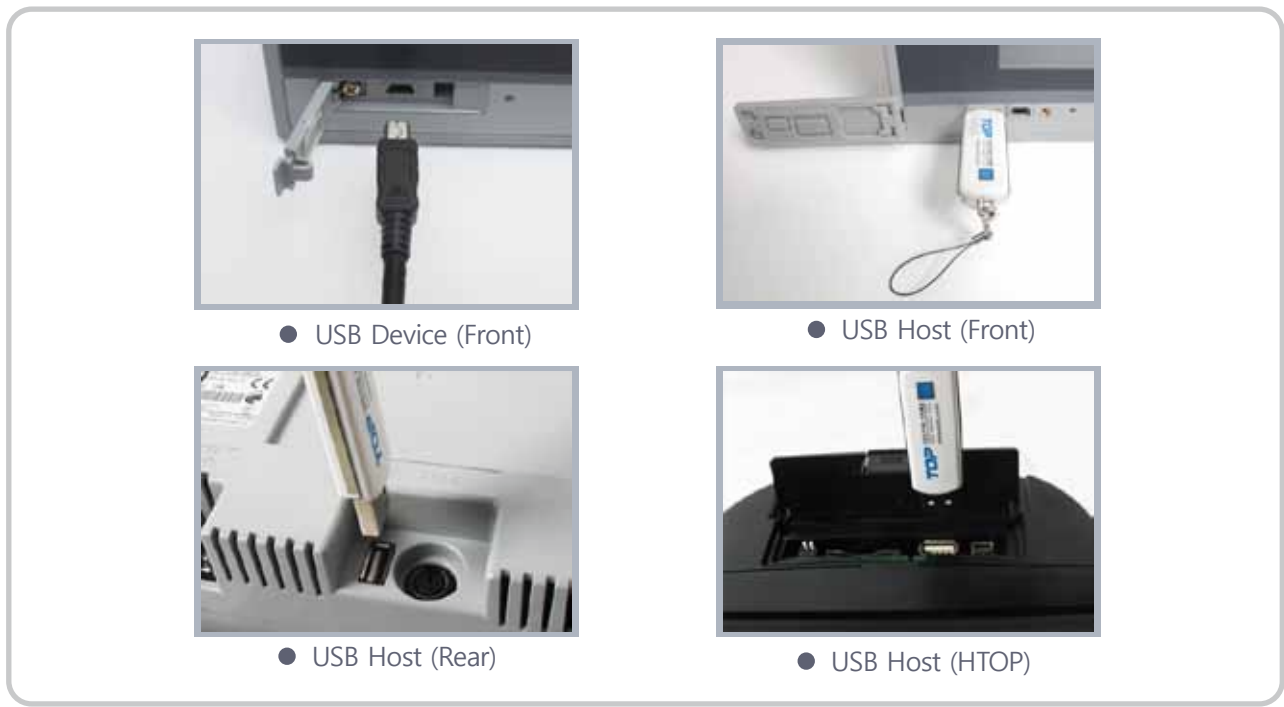


Interface

TOP Rear Port [* Option]

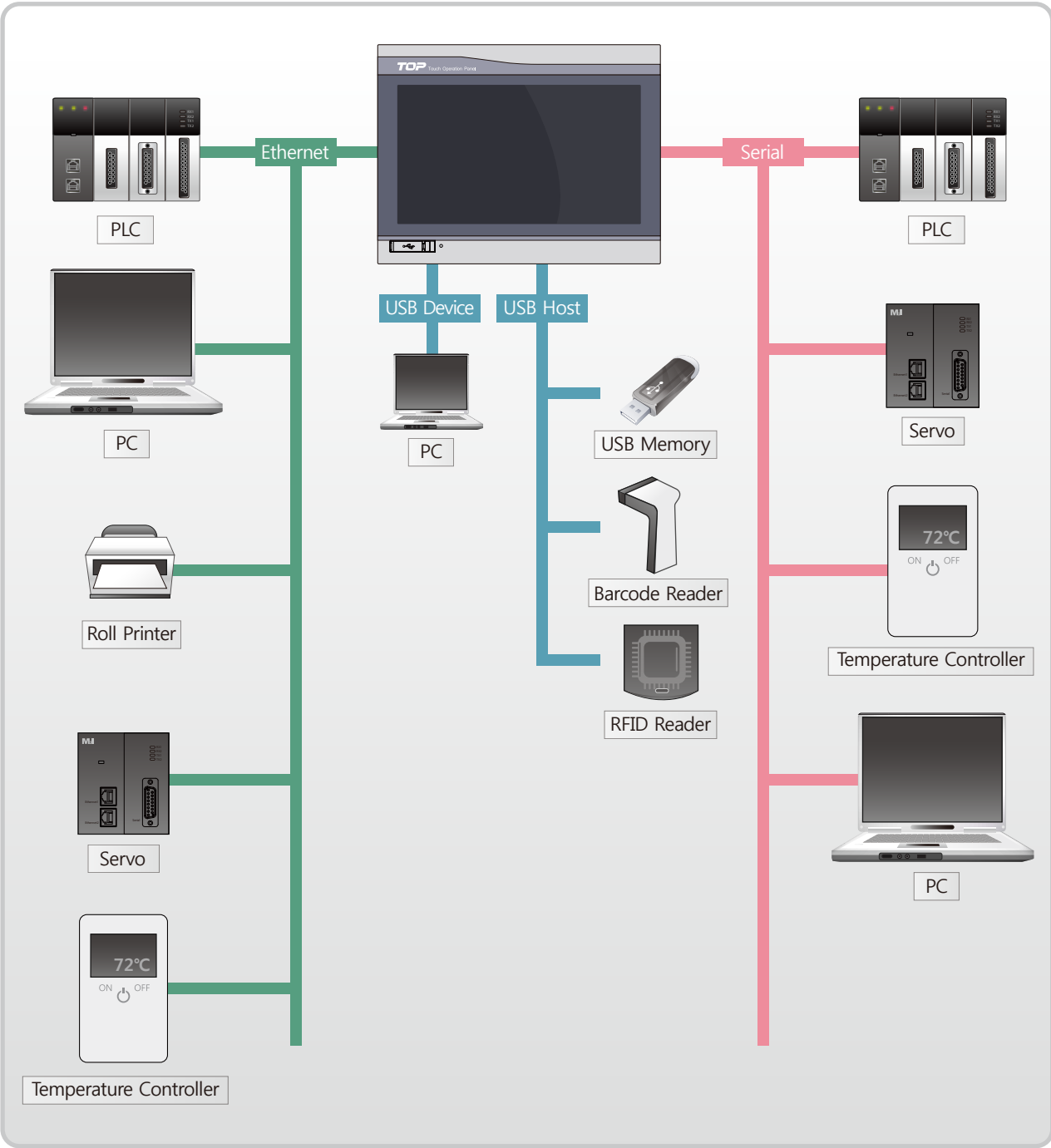


TOP USB Port



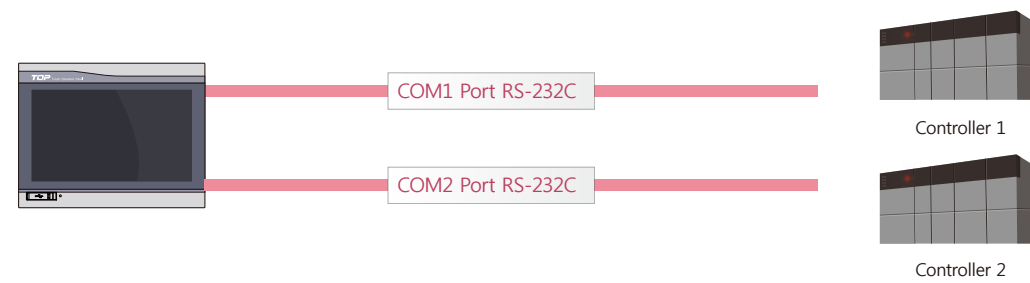
1. Ports and Configuration

Configuration

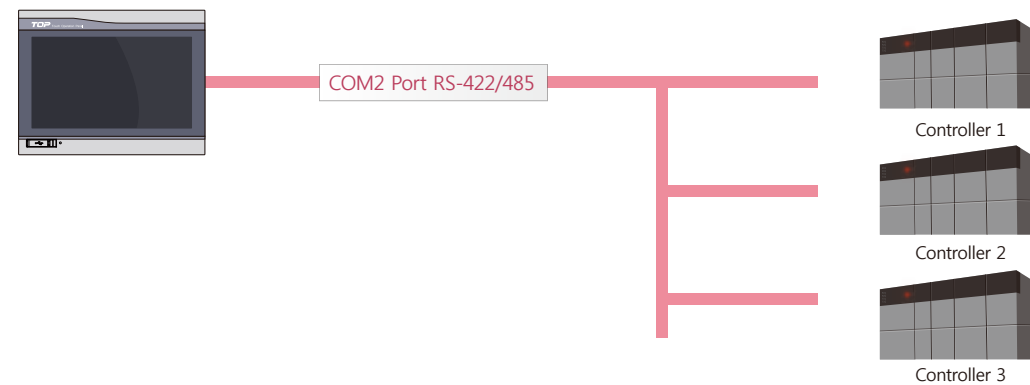


2. Communication Method

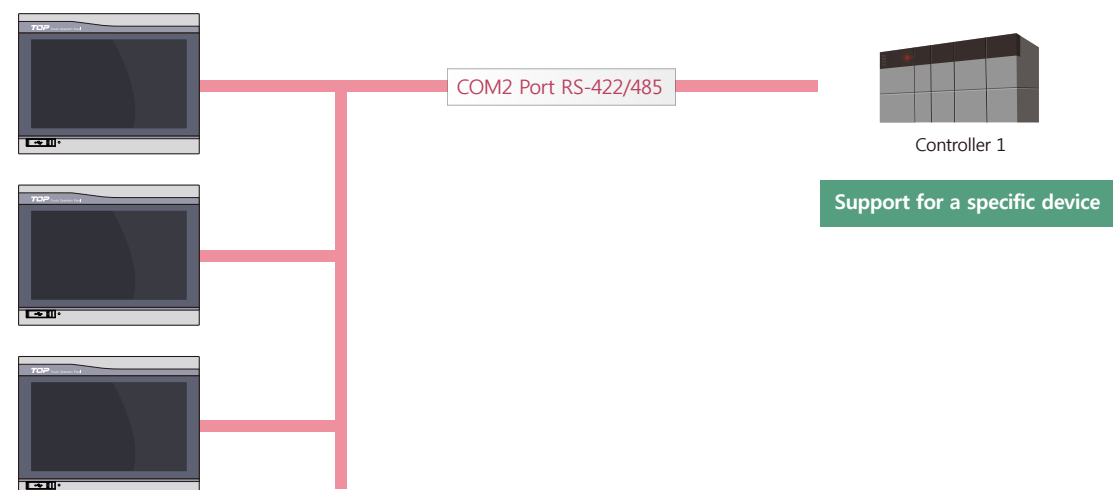
Serial RS-232C (MAX 2 controllers)



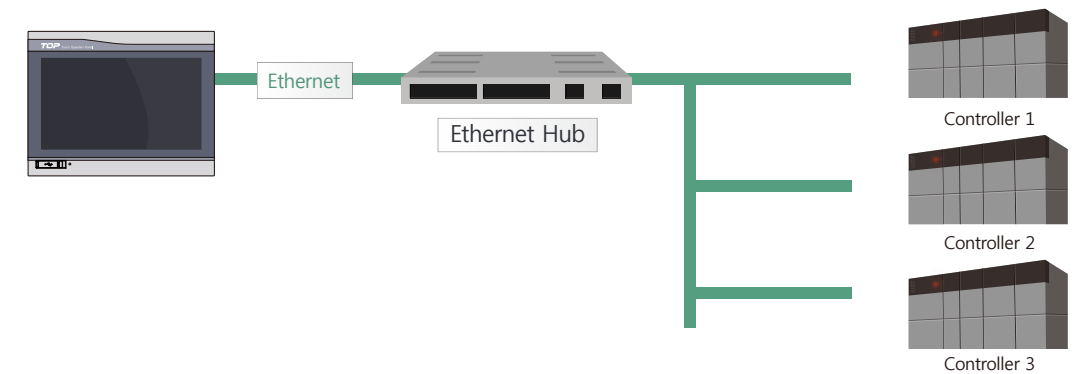
Serial RS-422/485, 1:N(TOP:Controller)



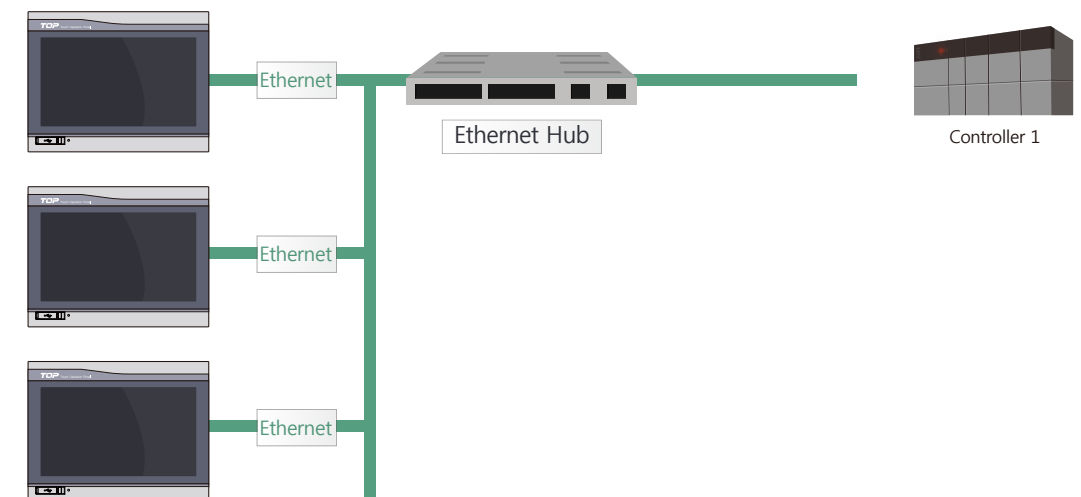
Serial RS-422/485, N:1(TOP:Controller)



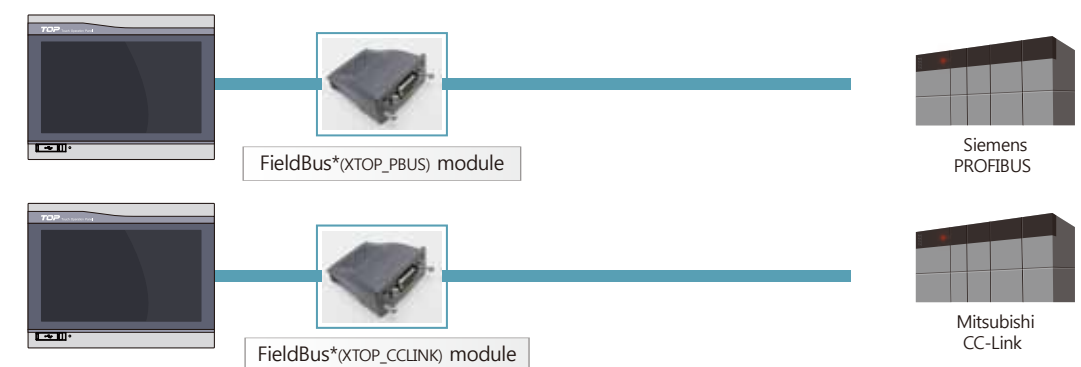
Ethernet 1:N(TOP:Controller)



Ethernet N:1(TOP:Controller)



FieldBus [* Option]



3. Connectable PLC

Manufacturer	Series	CPU Type	RS-232C/422/485	Ethernet
Connectable PLC				
MITSUBISHI Electronic Corporation	MELSEC-Q	Q□□/00J/□□H/□□UDH/□□UDEH	●	●
	MELSEC-FX	FX0/1/2/1S/1N/2N/2NC/3U/3UC/3G	●	
	MELSEC-A	10/20GM	●	
		A1N/2N/3N	●	●
		A1S(H)/2S(H)/AOJ2(H)	●	
		A2A/3A/2A-S1	●	●
OMRON Industrial Automation	MELSEC-A	A2U/3U/4U/2USH	●	●
		CC-Link(RD)	●	
		CC-Link Master Device	●	
		CC-Link	●	
	SYSMAC C.J2	C.J2H	●	●
	SYSMAC C.J1	C.J1G/1M	●	●
LS Industrial Systems	SYSMAC CS1	CS1G/H	●	●
	SYSMAC CP	CP1L/1H	●	●
	SYSMAC C	C50/120/200/500/1000	●	
		CQM1/1H	●	
		CPM1/2A/2C	●	
		CPM1/2A/2C	●	
SIEMENS AG.	XGT	XGK/XGI/XGR	●	●
	XGB	XEC/XBC/XBM	●	●
	GLOFA-GM	GM1/2/3/4/6/7	●	●
	Master-K	80/120/200/300/1000S	●	●
		10S1/10/30/60/100S	●	
		60/200H	●	
Rockwell Automation (Allen Bradely)	SIMATIC S7-1200	500(H)/1000	●	
		All Models	●	●
		SIMATIC S7-400	●	●
		All Models	●	●
	SIMATIC S7-300	All Models	●	●
	SIMATIC S7-200	All Models	●	●
MODBUS	SIMATIC S5	90/95/100/115/135/155U	●	
	PROFIBUS DP	PROFIBUS DP Master Device	●	
	ControlLogix	1756	●	●
	CompactLogix	1768/1769	●	●
	MicroLogix	1000/1200/1500 system	●	●
	SLC500	SLC5/03/04/05	●	●
GE Fanuc Intelligent Platforms	PLC-5	PLC5/11/20/30/40/40L/60/60L	●	
	MODBUS	All Models	●	
	MODBUS/TCP	All Models	●	●
	VersaMax PLC	IC200C/N/U□□□□□	●	●
	Series 90-30 PLC	IC693C□□□□□	●	●
	Series 90-70 PLC	IC697C□□□□□	●	●
Schneider Electric Industries	PACSystems RX3i	IC695□□□□□	●	●
	PACSystems RX7i	IC698C□□□□□	●	●
	Micro	TSX37 All models	●	
	Premium	TSX/TPMX P57 All models	●	●
	Twido	TWD LCAA/LMDA All models	●	
	Quantum	140 CPU All models	●	●
PANASONIC Electric Works	Momentum	171 CCS/CCC All models	●	●
	M340	M340	●	●
	MDrive	MAI3CRL23□6-□□□	●	
	FP	FP2(SH)/X/Z/O/e/M/10S(H)/3/1,FP-X	●	
	PROGIC-8	PROGIC-8	●	
	MP900/2000	MP920/930/2200/2300	●	●
YASKAWA Electric Corporation	Control Pack	CP-9200SH	●	
	FA-M3	F3SP□□-□N/H/S	●	●
	Micrex-SX	SPH□□□	●	
	Micrex-F	F, F□□(S/H), F1□□(S/H), F200	●	
	KV	KV-700/1000	●	
	KV	KV-10/24	●	
FATEK Automation Corporation	DL-205/305/405	D2 240/330/430	●	
	FBs	FBs-□□MA/MC/MN	●	●
	FBe	FBe-□□MA/MC	●	
	FBn	FBn-□□MCT	●	
	Alpha	N7/NX(70/700/750/CCU)	●	
	Plus	NX7/NX Plus(70P/700P/CCU+)	●	
RS Automation	SPC	SPC-10/100/120S/300	●	
	X8	All models	●	●
	CP	CM1-CP3/4□	●	●
	XP	CM1-XP1/2/3□	●	●
	BP	CM2-BP16/32□□	●	●
	Tiny PLC	TCP-3X/9X	●	
KDT Systems	Qubloc	All models	●	
	EH-150	EH-150	●	
	Micro EH	Micro EH	●	
	POSFAA	POSFAA-A	●	
	EC20	EC20	●	
	DVP	DVP series	●	
Comfile Technology	M/VB/VH	M series / VB series / VH series	●	
	HITACHI Industrial Equipment Systems			
	POSFAA	POSFAA-A	●	
	EC20	EC20	●	
	DVP	DVP series	●	
	VIGOR Electric Corporation			

Manufacturer	Series	CPU Type	RS-232C/422/485	Ethernet
Connectable DDC				
ASIC	DDC	DDC	●	
Speed tech	ExtDDC	ST/PS, ST/RS, ASIC/2-7040	●	
SAIA	SAIA	PCD2	●	
Connectable Temperature Controller				
RKC Instrument	CB	CB100/400/500/700/900	●	
	FB900/400	All models	●	
	HA900/400	All models	●	
	MA900/901	All models	●	
	SRV	V-TIO-A/V-TIO-C	●	
	SRX	X-TIO-A	●	
	SA200/100	SA100	●	
	SR Mini HG	H-PCP-A/H-PCP-J	●	
	SRZ	Z-TIO/DIO/CT/COM	●	
	NP200/100	All models	●	
HanyoungNux	NX, PX	NX9/7/3/2, PX9/7	●	
	RT	RT9	●	
	UX100	UX100	●	
	NOVA500	SD5□□/SL5□□/SP5□□/ST5□□	●	
SamwonTech	NOVA300	SD3□□/SS3□□/ST3□□	●	
	SP790	SP7□□	●	
	UT/UP/UM	UT(/UP/UM/UD)3/4/5/7/10□□	●	
YOKOGAWA Electric Corporation				
CHINO Corporation	DB	DB1/DB2 All models	●	
	KP	KP1/2/3 All models	●	
	LT	LT23/3/4/830 All models	●	
	JU	JU All models	●	
	JW	JW All models	●	
IMO	DTP	DTP/TP	●	
Connectable Inverter				
Sanken	SAMCO-i	ihf/ipt/QS/QT/lt/iF	●	
LS Industrial Systems	Starvert Inverter	SV-IS7/G5A/P5A/C5/V5/G5/S5/H/V/S3	●	
ABB	ACS	ACS140/400/500	●	
Huropec	HC	HC	●	
FEBA	UDICON	UDICON	●	
SMARTCON	SMARTCON	SMARTCON	●	
FUJI Electric Systems	Inverter	FRN□□□□11S-□	●	
IMO	Jaguar	CUB/VXSM/VXM	●	
Connectable Weigh Indicator				
AND	AD	AD4326/4327/4328/4329	●	
CAS	CI/NT	CI/NT	●	
BONGSHIN	BS	BS	●	
SEWHACNM	SI 3000		●	
SinHan	SH5100		●	
Connectable Barcode Reader				
General Barcode Reader	USB/RS-232C	USB/RS-232C	●	
Connectable RFID Reader				
OMRON	RFID	V680	●	
LS Industrial Systems	RFID	XCODE-1306/1307	●	
CEYON Technology	RFID	RIM125	●	
		TRA5	●	
Connectable Motion Controller				
DONGBU (DASAROBOT)	IMS-J	IMS-J	●	
	iM-Σ	iM-Σ2/3/4/5/6/7/8	●	
	UNICON	UNICON	●	
	DTR	DTR2/3/4	●	
ROBOSTAR	Newro	RCS6000/RCM	●	
	MCU	MCU-MA/MP/XA/XP	●	
	MCU2	MCU-MA2/MP2/XA2/XP2	●	
EMOTIONTEK	MCS	MCS-80A4/P4/A8/P8	●	
	Campositioner	3F88L-160/162	●	
OMRON	MMC	MMC	●	
Gidding & Lewis	Hi4 Robot	BD412 Board	●	
Hyundai Heavy Industries	VisualMotion	VM7, VM8	●	
Bosch-Rexroth AG	PMAC	Mini-PMAC	●	
Delta-Tau				
Connectable Servo				
MITSUBISHI Electronic Corporation	MELSERVO	MR-J2S/M, MR-J3	●	
HIGEN Motor(ㄱOTIS)	FDA	FDA6000/7000	●	
LS MECAPION (ㄱMetronix)	Anypack	APD-VS/VP/VK/VN□□	●	
Connectable Pump				
Alcatel	ADP/ADS		●	
Ebra	EST/ESR/ESA		●	
Edward	iM		●	
Kashiyama	SDE		●	
LOT	DD		●	

Adopted from V4.0				
Manufacturer	Series	RS-232C/422/485	Ethernet	
Mitsubishi	Melsec-Q Series CPU Direct(U Type)	●		
Omron	NJ Ethernet/IP		●	
	V680 RFID System Series	●		
	V680S Ethernet RFID System Series		●	
Siemens	SIMATIC S7-1200 Ethernet		●	
Dongbu(DASAROBOT)	iM-U Series Computer Link	●		
	iM-U Series Ethernet		●	
Lenze	L-Force servo driver	●		

M2I Corporation, Global HMI specialized company,
always communicates with customers for satisfaction and enhances the quality of products by endless R&D.



Touch Operation Panel

