



Automation for a Changing World

# Delta Human Machine Interface DOP-100 Series (Ethernet/Standard/Basic)



New  
Upgrade

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 **DELTA**  
Smarter. Greener. Together.

# Human Machine Interface Pioneer and a Leading Brand

The DOP-100 Series Human Machine Interfaces include an Ethernet type, standard type and basic type. All models adopt the latest Cortex-A8 high-speed processor and 65,536 color LCD screen with high brightness, high contrast and high color. In addition, they are equipped with the HMI programming software DopSoft, built-in Lua editor for easy programming as well as alarm / history log / user authority functions for highly efficient management.

For customers who are pursuing smart manufacturing and starting to build data exchange between equipment, factories, and cloud, the Ethernet type supports Ethernet and other network communication, including FTP, e-mail, VCN remote monitoring, and NTP (Network Time Protocols). It also adopts online coding tips, and a variety of cloud services. The DOP-100 Ethernet narrow-framed type supports 16 languages\* input to achieve powerful localized operation for global customers.

For general applications, the standard type fulfills the needs of most customers in various industries; and the basic type is suitable for a simple operating structure with no built-in power/communication isolation and fewer communication ports.

With advanced communication capabilities and enhanced functions, the DOP-100 Series elevates machine efficiency to bring more value to our customers, achieving "Automation for a Changing World"!

\* Supports 16 languages input: English, Traditional Chinese, Simplified Chinese, French, German, Russian, Japanese, Korean, Spanish, Portuguese, Hindi, Turkish, Arabic, Persian, Italian and Polish





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## Design

### Slim and Compact Designs

- ▶ The DOP-100 Series adopts aesthetic slim and compact panel designs applicable to a variety of operating environments



#### Ethernet Type:

- ▶ Narrow Frame Models: DOP-103WQ (4.3") / DOP-107WV (7") / DOP-110WS (10.1")
- ▶ General Frame Models: DOP-107EV(G) (7")

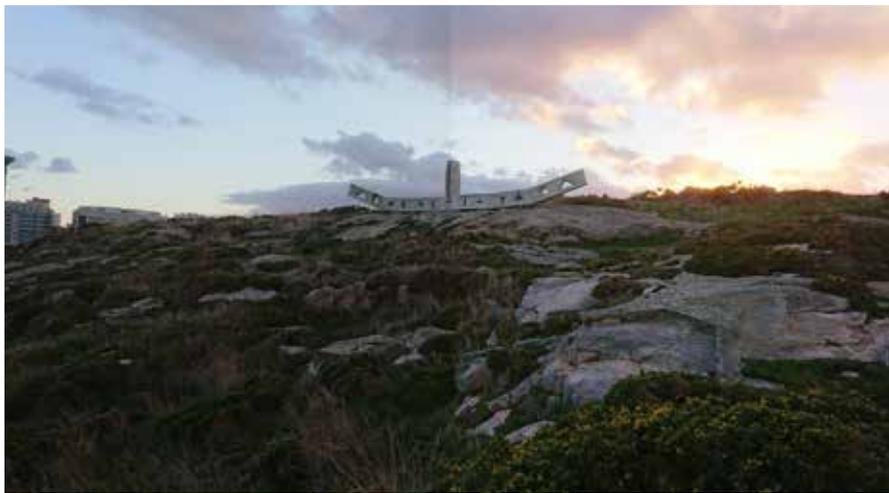
**Standard Type:** DOP-107CV (7") / DOP-110CS (10.1")

**Basic Type:** DOP-103BQ (4.3") / DOP-107BV (7")

\* Mounting dimensions: 118.8 x 92.8 ~ 255 x 170 (mm), compatible with the DOP-B Series

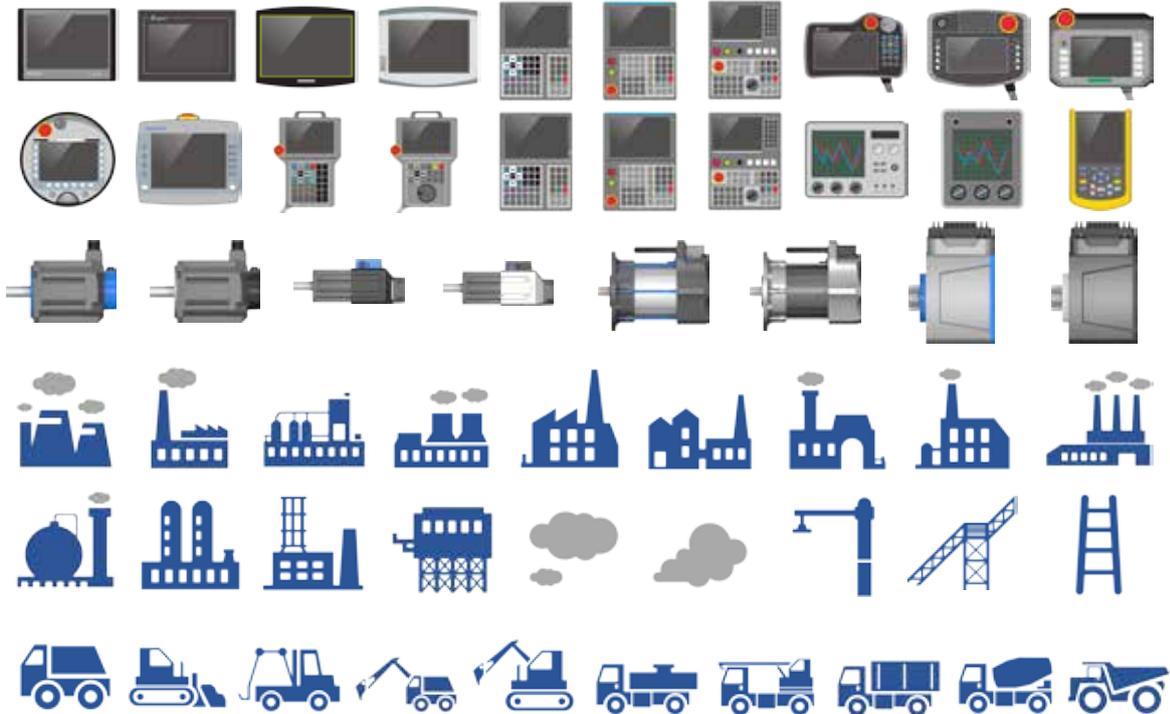
### Bright and Colorful Display

- ▶ New 65,536 color LCD screen with high brightness and high contrast display for colorful and vivid images



## Abundant Elements

- ▶ Abundant built-in graphic elements for a vivid interface display for use in a variety of industrial applications



## Smooth Animation

- ▶ New smooth animation technology for a more close-to-real dashboard display



# Programming Software - DopSoft

User-friendly friendly programming interface



## Bookmark Management

Bookmark menu allows users to easily switch pages

## Project Management

Quickly switches items with project branches

## Editing Area

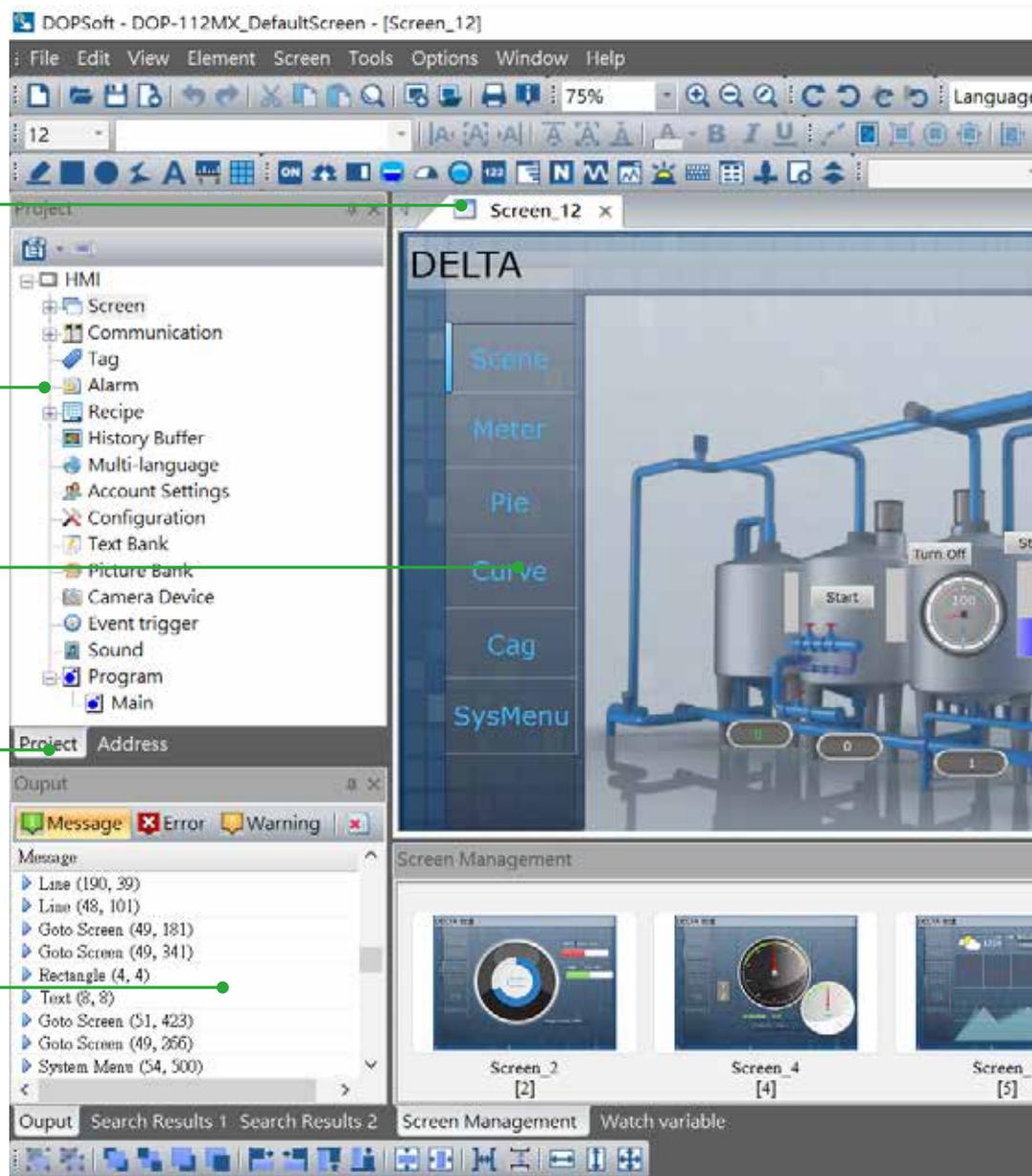
Real-time editing display

## Output List

Automatically displays each editing screen. Users can review and resolve errors with simple clicks

## Output Preview

Quickly browses overall project via output preview



### Customized Keyboard

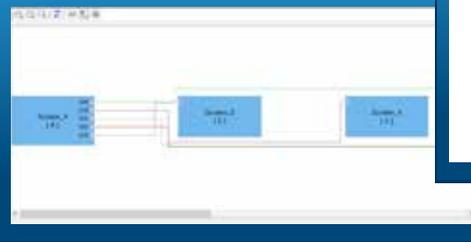


Abundant Accessories

### Field Devices



### Process Paradigms



### Tools

Shortcut icons to help enhance work efficiency

### Properties

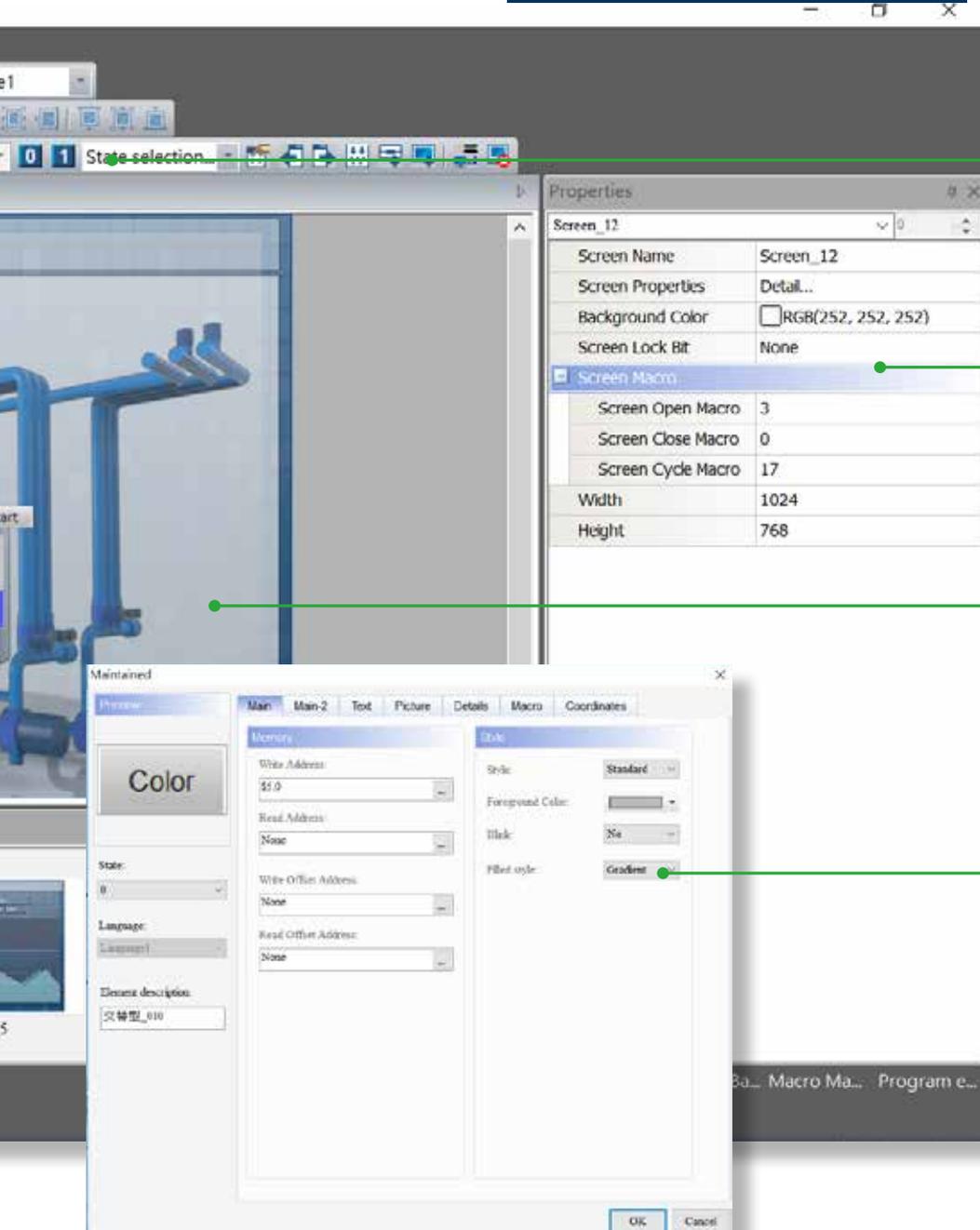
Provides easier property setup via group lists

### Lua Editor

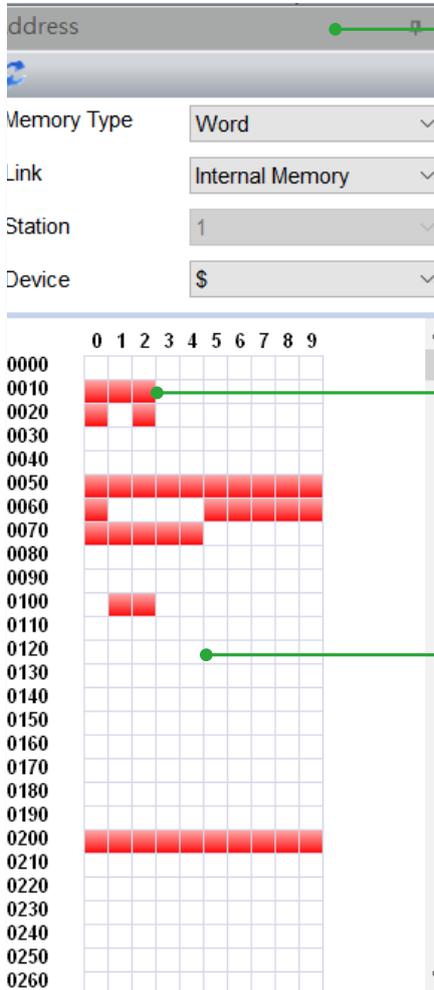
Provides an editing platform similar to C language for quick second development

### Quick Setting Window

Standard accessory dialog box adopts built-in preview and quick-edit functions



## Editing Windows



### Register Window

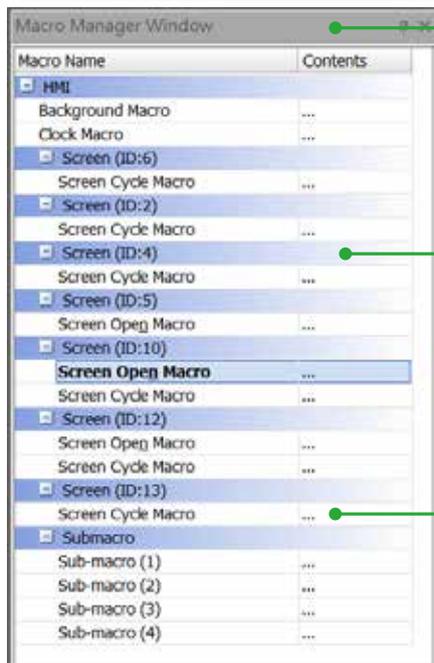
The red and white blocks allow users to view the register status for easier management



Red blocks indicate used registers

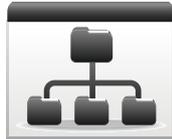


White blocks indicate empty registers



### Macro Management Window

Users can view all types of macros in the project



Selects a macro in the list



Directly edits the macro after clicking

```

11
12 while true do
13
14   -- read from 020, 021
15   dx = mem.inter.Read(20)
16   dy = mem.inter.Read(21) / 10
17
18   -- get the path by cos formula
19   r = r + dy
20   x = x + dx
21   y = math.cos(r) * 100 + offsety
22
23   if (x < 0) then
24     value = math.cos(radian)
25     Parameters
26     radian: number, Radian
27     Returns
28     value: number
29     Example) cos(30 deg)
30     w = math.cos(math.rad(30)) then
31     no ym.00020
32     0, 0xFFEEFF))
33
34   mem.inter.Write(2, 0xFF00)
35
36 end

```

### Lua Tool Bar (Ethernet Type only)

-  Debugging
-  Debug stopped
-  Program break point

### Online Coding Tips (Ethernet Type only)

Simply move the mouse to the selected codes, and Lua editor will display tip windows for the codes

Watch variable

Name	Value	Global / Local	Type	Format
dx	3	Global	Number	DEC
dy	0.1	Global	Number	DEC
r	0.1	Global	Number	DEC
x	3	Global	Number	DEC
y	0	Global	Number	DEC
name	nil	Local		DEC

### Parameter Monitoring Window (Ethernet Type only)

Monitors parameter variation during program development

Items

- Basic syntax
  - if then else elseif end
  - for var=1,3 do ... end
  - while
  - table, array
  - + - \* / % ^
  - function, call function
  - logic: xor and or not lshift rshift
- Internal memory - \$
  - mem.inter.Read
  - mem.inter.ReadDW
  - mem.inter.ReadFloat
  - mem.inter.ReadBit
  - mem.inter.Write

[Detail]

```

if (100 > 20) then
  -- do something
end

if (100 > 20) then
  -- do something
else
  -- do something
end

[boolean expression]
a = 100
if (a == 100) then equal = true end
if (a ~= 100) then not_equal = true end
if (a <= 100) then less_than_or_equal = true end
if (a >= 100) then greater_than_or_equal = true end
end

```

### Programming Assistance Window

- Provides online assistance:
- Lua code templates
  - Program usage and properties
  - Program samples

# Advanced Alarm



Strengthened alarm functions allow users to easily manage machine operations and quickly eliminate problems

- ▶ Alarm messages contain current register data for issue analysis

Detail			Properties		
No.	Message Content	Category	Message		
1*	Temp. too High , PV is %d1	1	Temp. too Low , PV is 12		
2*	Temp. too Low , PV is %d1	1	Temp. too High , PV is 91		
3*	PV is %d1 , ALM Mail	2	Temp. too Low , PV is 15		
4		0	Temp. too Low , PV is 23		
5		0			

## Alarm Sorting

Alarm sorting via the "Sorting" function is based on alarm attributes for quick information inquiries

## Supports Compound Address Monitoring

Monitors Word and Bit documents at the same time

No.	Message Content	Category	Type	Address	Trigger Condition	Monitor Address
1*	Temp. too High , PV is %d1	1	Word	\$15	\$15 > 70	\$15
2*	Temp. too Low , PV is %d1	1	Word	\$15	\$15 < 30	\$15
3*	PV is %d1 , ALM Mail	2	Bit	\$198.4	On	\$15
4		0	Bit	None	On	None

## Versatile Alarm Triggering Conditions

Triggering conditions can be setup via built-in function, no external editing programs are required

## Alarm Notification (Ethernet Type only)

Automatically sends out alarm notification emails to logged-in recipients when alarms occur; supports the Secure Sockets Layer (SSL) protocol to ensure safe data transmission



- Indicates the alarm trigger and recovery time, and provides alarm acknowledge time / date (Ack) to confirm and monitor troubleshooting progress

Message	Trigger	Ack	Recovery
Temp. too Low • PV is 12	15:07:12 02/03/2017		15:07:15 02/03/2017
Temp. too High • PV is 91	15:07:15 02/03/2017	15:07:56 02/03/2017	15:07:22 02/03/2017
Temp. too Low • PV is 15	15:07:22 02/03/2017		15:07:25 02/03/2017
Temp. too Low • PV is 23	15:07:28 02/03/2017	15:07:58 02/03/2017	15:07:34 02/03/2017

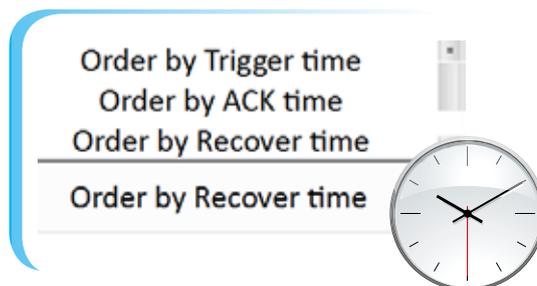
## Alarm Filtering

Advanced address control filtering allows users to find specified alarm messages according to user requirements

Action	
Address control filtering allows users to find specified alarms	
No.	Action
0	Preset state, shows all triggered alarms
1	Hide alarms with "Restore Time" and "Confirm Time"
2	Hide alarms with "Restore Time"
3	Hide alarms with "Restore Time" or "Confirm Time"
4	Hide alarms with "Confirm Time"

## Alarm Ordering

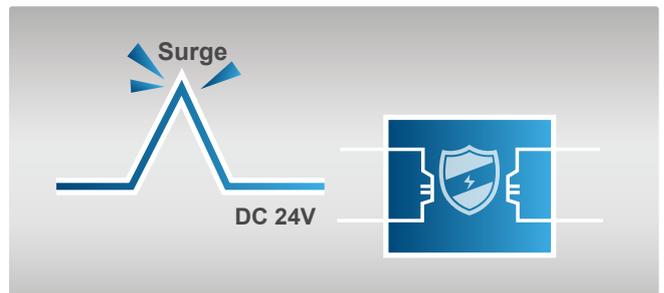
Displays alarms in the order of Trigger Time / Confirm Time / Restore Time



# Robust Hardware

## Power Isolation

- ▶ Built-in power isolation circuits provide complete protection against accidental external spikes



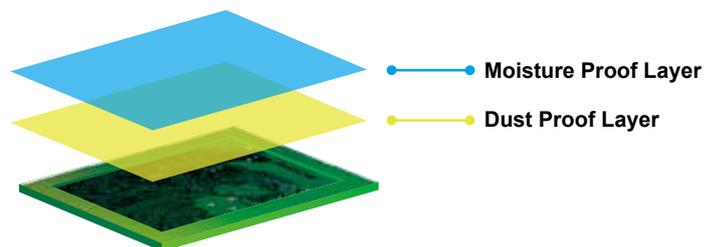
## Fully Isolated Communication Interface

- ▶ Built-in COM and Ethernet isolation circuits protect against noise that can occur from the grounding of various devices such as PLCs, servo drives, inverters and others



## PCB Coating

- ▶ PCB coating for enhanced durability and to protect against humidity and dust for applications in different environments

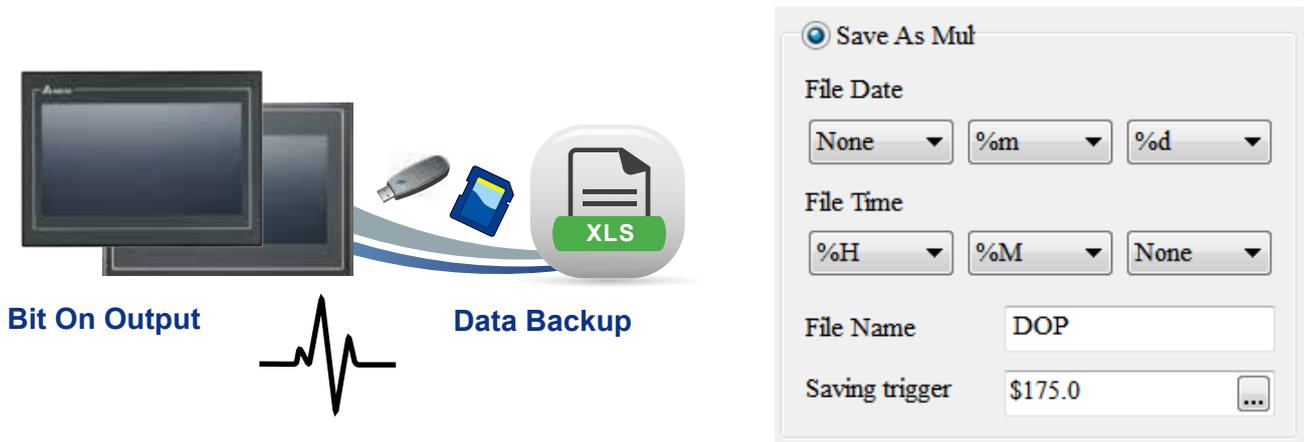


Model	Power Isolation	Communication Isolation
<b>Ethernet Type (Narrow Frame Model)</b>		
DOP-103WQ	Y	Y
DOP-107WV	Y	Y
DOP-110WS	Y	Y
<b>Ethernet Type (General Frame Model)</b>		
DOP-107EV	Y	Y
DOP-107EG	Y	Y
<b>Standard Type</b>		
DOP-107CV	Y	N
DOP-110CS	Y	N
<b>Basic Type</b>		
DOP-103BQ	N	N
DOP-107BV	N	N

# Data Management

## Historical Data

- ▶ Generates historical reports with user-defined file names and timestamps through Bit Control



The diagram illustrates the data management process. On the left, a computer monitor and laptop are connected to a USB drive and an SD card. A pulse waveform is shown below the computer. A green circle with 'XLS' and a document icon represents the data backup. Labels 'Bit On Output' and 'Data Backup' are positioned below the computer and storage devices respectively. On the right, a screenshot of the 'Save As Multiple' dialog box is shown. It includes settings for 'File Date' (None, %m, %d), 'File Time' (%H, %M, None), 'File Name' (DOP), and 'Saving trigger' (\$175.0).

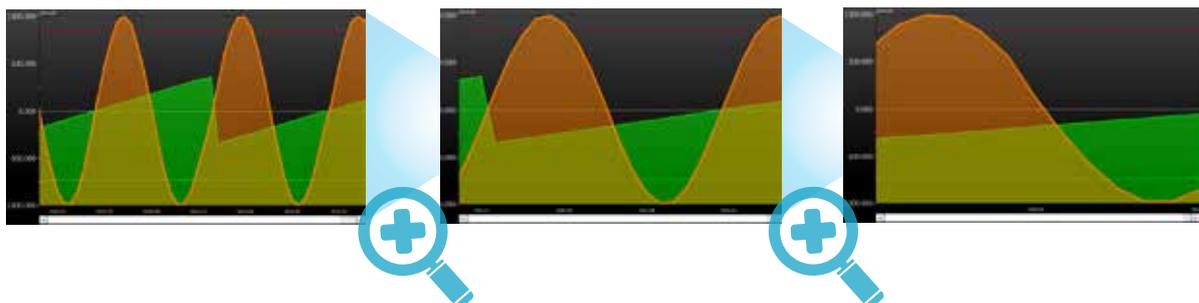
## Historical Data Review

- ▶ Allows historical data review on backup in USB disk or SD cards



## Zoom In / Out Display

- ▶ Zoom in / out function for convenient data viewing



## Recipes

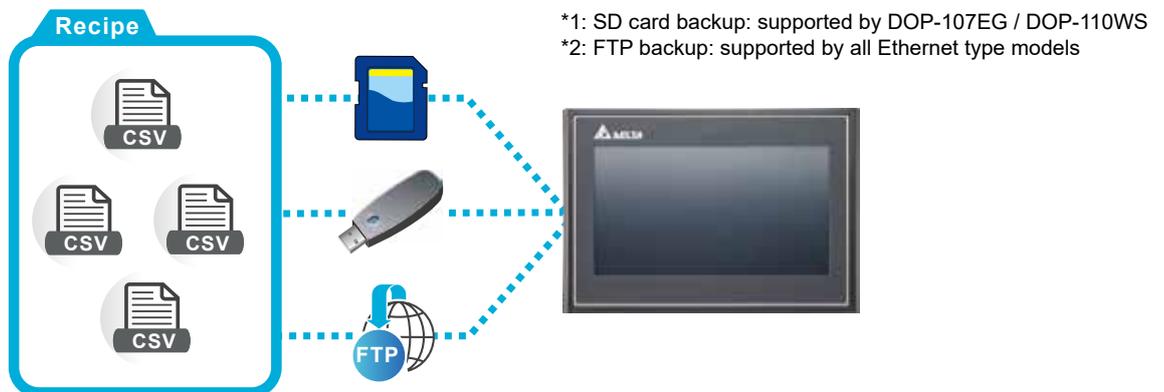
- ▶ Supports 2D and 3D recipe groupings, and is more flexible in building recipe databases
- ▶ Various recipe formats, including text format (Unicode) which can also be used as formula notes

	D100	D101	D102	D103	D104	D105	D106	
	D100	D101	D102	D103	D104	D105	D106	50.7
Cake Recipe 1	Strawberry	300	0	0	221.56	533.1	150.7	63.9
Cake Recipe 2	Chocolate	0	300	0	387.98	490.8	163.9	79.8
Cake Recipe 3	Vanilla	0	0	300	120.14	505.3	279.8	
	Char	Unsigned DEC			Floating			
		Strawberry	Chocolate	Vanilla	Sugar	Flour	Milk	

Recipe Group 2 (points to D100-D106 header)

Recipe Group 1 (points to Strawberry, Chocolate, Vanilla, Sugar, Flour, Milk)

- ▶ Recipes can be saved in CSV files for convenient editing on PCs
- ▶ Allows recipe update or backup through USB disks, SD cards<sup>\*1</sup> or FTP<sup>\*2</sup>



## PDF for Data Review

- ▶ Saves manuals or instruction PDF files in USB disks or SD cards for reference anytime



# User Authority Management

## Account and Authorization Management

- ▶ Supports 8 levels of authorities and allows 8 accounts (account name/password) for each level
- ▶ Different functions and operation access for each authority level to enhance operation safety



## Operation Log

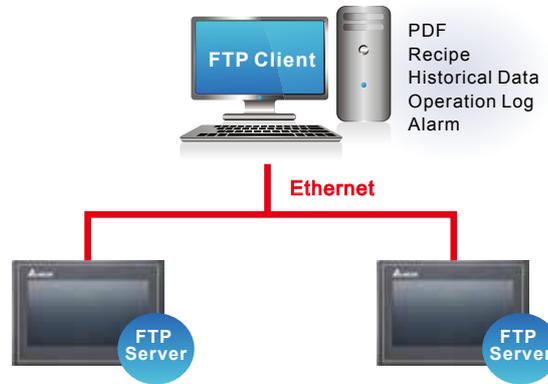
- ▶ Operation log for different user accounts to trace/analyze possible causes of malfunctions
- ▶ Provides comprehensive information for managers to analyze the operating habits of different users and improve efficiency

Time	Date	User	Level	Screen	Action	Address	Pre Value	Change Value	Descriptor
19:22:18	2016.12.02	MANAGER	7	Screen_6	Goto Scrn	6	1	1	換畫面_006
19:22:20	2016.12.02	MANAGER	7	Screen_1	Goto Scrn	1	10	10	換畫面_001
19:22:24	2016.12.02	MANAGER	7	Screen_10	Set Val	\$51.1	1	0	交替型_003
19:22:27	2016.12.02	MANAGER	7	Screen_10	Goto Scrn	10	1	1	換畫面_006
19:22:30	2016.12.02	MANAGER	7	Screen_1	Goto Scrn	1	7	7	換畫面_001
19:22:57	2016.12.02	MANAGER	7	Screen_7	Set Val	\$20	-730	-698	數值輸入_0
19:23:02	2016.12.02	MANAGER	7	Screen_7	Goto Scrn	7	1	1	換畫面_006
19:23:05	2016.12.02	MANAGER	7	Screen_1	Goto Scrn	1	6	6	換畫面_001
19:23:47	2016.12.02	MANAGER	7	Screen_6	Level Switch	7	4	4	密碼輸入_0
19:23:52	2016.12.02	OPERATOR	4	Screen_6	Goto Scrn	6	1	1	換畫面_006
19:23:55	2016.12.02	OPERATOR	4	Screen_1	Goto Scrn	1	3	3	換畫面_001
19:24:03	2016.12.02	OPERATOR	4	Screen_3	Set Val	ENRCP10	12ED	65AE	數值輸入_0
19:24:09	2016.12.02	OPERATOR	4	Screen_3	Set Val	ENRCP11	456.32	125.93	數值輸入_0
19:24:14	2016.12.02	OPERATOR	4	Screen_3	Set Val	ENRCP17	400	452	數值輸入_0
19:24:15	2016.12.02	OPERATOR	4	Screen_3	Goto Scrn	3	1	1	換畫面_006
19:24:17	2016.12.02	OPERATOR	4	Screen_1	Goto Scrn	1	6	6	換畫面_001

# Cloud Integration (Ethernet Type only)

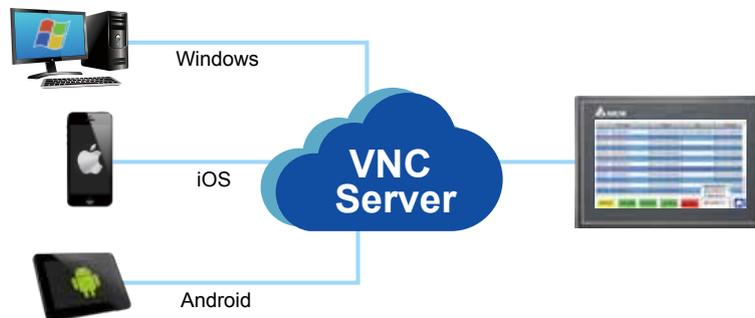
## FTP Server

- ▶ Built-in FTP server to update recipes or PDF files, and backup historical data, operation logs, and alarms



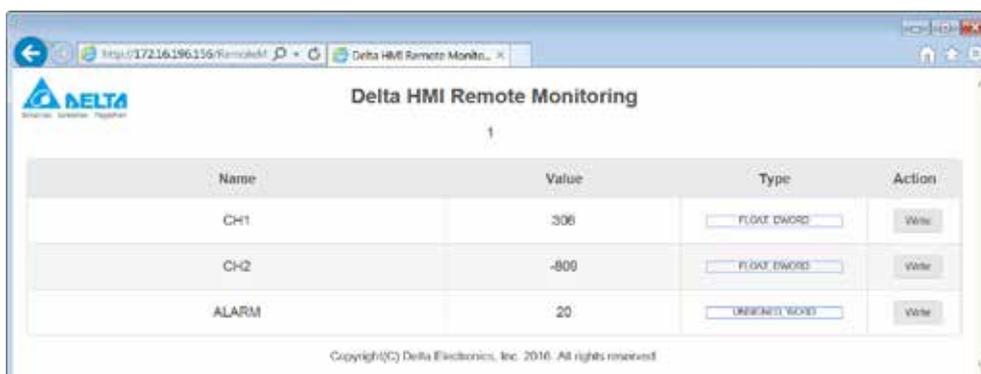
## VNC Server

- ▶ Built-in VNC server allows remote monitoring and operating of the DOP-100 Series via VNC Client APP (Windows, iOS, Android)
- ▶ Lock function: temporarily blocks remote operating authorization when personnel operating on-site avoid unsynchronized commands; VNC server only allows remote monitoring when the lock is on



## Web Monitoring

- ▶ Allows direct monitoring of register data via web page without additional software



# Hardware Specifications

## Ethernet Type (Narrow Frame Models)

Model		DOP-103WQ	DOP-107WV	DOP-110WS
LCD Module	Display	4.3" TFT LCD	7" TFT LCD	10.1" TFT LCD
	Color	65,536		
	Resolution (Pixels)	480 x 272	800 x 480	1024 x 600
	Back Light	LED Back Light		
	Back Light Brightness (cd/m <sup>2</sup> )	400	450	450
	Back Light Life (Hour) <sup>(Note 1)</sup>	10,000	30,000	30,000
MCU		ARM Cortex-A8 (800MHz)		
Flash ROM (Bytes)		256 MB		
RAM (Bytes)		512 MB		
Touch Panel		Four-wire resistor, over 10,000,000 pressing times		
Buzzer		Multi-Tone Frequency (2K ~ 4K Hz) / 80dB		
Ethernet Interface		1 Port <sup>(Note 2)</sup> , 10/100 Mbps auto-sensing		
USB		1 USB Slave Ver 2.0 / 1 USB Host Ver 2.0		
SD		N/A	N/A	N/A
Serial COM Port	COM1	RS-232 (supports hardware flow control) / RS-485 <sup>(Note 2)</sup>	RS-232 (supports hardware flow control)	
	COM2	RS-422 / RS-485 <sup>(Note 2)</sup>	RS-232 (supports hardware flow control) / RS-485 <sup>(Note 2)</sup>	
	COM3	N/A	RS-422 / RS-485 <sup>(Note 2)</sup>	
RTC		Built-in		
Cooling		Nature air circulation		
Certification		CE / UL		
Waterproof		IP65 / NEMA4 / UL Type 4X (indoor use only)		
Operation Voltage <sup>(Note 3)</sup>		DC +24V (-15% ~ +15%) <sup>(Note 2)</sup>		
Voltage Endurance		A599V for 1 minute (between charging DC24 terminal and FG terminals)		
Power Consumption <sup>(Note 5)</sup>		Max. 5.8W <sup>-3</sup>	Max. 8.4W <sup>-3</sup>	Max. 11W <sup>-3</sup>
Backup Battery		3V lithium battery CR2032 × 1		
Backup Battery Life		Depends on the temperature used and the conditions of usage, usually about 3 years or more at 25° C		
Operation Temperature		0°C ~ 50°C		
Storage Temperature		-20 °C ~ +60 °C		
Ambient Humidity		10% ~ 90% RH (0 ~ 40° C), 10% ~ 55% RH (41 ~ 50° C), Pollution Degree 2		
Vibration		IEC 61131-2 compliant 5Hz ~ 8.3Hz = Continuous: 3.5mm, 8.3Hz ~ 150Hz = Continuous: 1.0g		
Shock		IEC 60068-2-27 compliant 15g peak for 11ms duration, X, Y, Z, directions for 6 times		
Dimensions (W) x (H) x (D) mm		137 x 103 x 37.1	196 x 136 x 39	270 x 180.9 x 47.75
Dimensions (W) x (H) mm		118.8 x 92.8	186.8 x 126.8	255.5 x 170.5
Weight		280g	560g	1,100g

1) The half-life of a backlight is defined as the original luminance being reduced by 50% when the maximum driving current is supplied to a HMI.

2) Built-in power isolation

3) An isolated power supply is recommended.

4) Some models are in the process of application for UL and KCC certification. For more information, please consult our distributors.

5) The value of the power consumption indicates the electrical power consumed by the HMI with no peripheral devices connected.

6) The content of this catalogue may be revised without prior notice. Please consult our distributors or download the most updated version at <http://www.deltaww.com>

# Hardware Specifications

## Ethernet Type (General Frame Models)

Model		DOP-107EG	DOP-107EV
LCD Module	Display	7" TFT LCD (65,535)	7" TFT LCD (65,535)
	Resolution (Pixels)	800 x 600	800 x 480
	Back Light	LED Back Light Half-life: 20,000 hours under ambient temperature (25° C) <sup>1)</sup>	
	Display area	141.00 x 105.75 mm	154.08 x 85.92 mm
	Back Light Brightness (cd/m <sup>2</sup> )	450 cd / m <sup>2</sup> (Typ.)	400 cd / m <sup>2</sup> (Typ.)
MCU		ARM Cortex-A8 (800MHz)	
Flash ROM (Bytes)		256 MB	
RAM (Bytes)		256 MB	
Touch Panel		Four-wire resistor, over 10,000,000 pressing times	
Audio Output	Buzzer	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB	
	AUX	Stereo output	N/A
Ethernet Interface		1 Port, 10/100 Mbps auto-sensing <sup>2)</sup>	1 Port, 10/100 Mbps auto-sensing <sup>2)</sup>
USB		1 USB Slave Ver 2.0; 1 USB Host Ver 2.0	
SD		SD <sup>1)</sup>	N/A
Serial COM Port	COM1	RS-232 (supports hardware flow control) <sup>2)</sup>	RS-232 (supports hardware flow control) <sup>2)</sup>
	COM2	RS-232 (supports hardware flow control) / RS-485 <sup>2)</sup>	RS-232 (supports hardware flow control) / RS-485 <sup>2)</sup>
	COM3	RS-422 / RS-485 <sup>2)</sup>	RS-422 / RS-485 <sup>2)</sup>
Auxiliary key		N/A	
RTC		Built-in	
Cooling		Natural air circulation	
Certification		CE / UL (please equip Shielding cables and line filters with capacity of 300ohm/100MHz)	
Waterproof		IP65 / NEMA4 / UL TYPE 4X (indoor use only)	
Operation Voltage <sup>3)</sup>		DC +24V (-15% ~ +15%) (please equip isolated-type power supplies) Supplied by Class 2 or SELV circuit (isolated from MAINS by double insulation)	
Voltage Endurance		AC500V for 1 minute (between charging DC24 terminal and FG terminals)	
Power Consumption <sup>5)</sup>		Max. 8.4W <sup>3)</sup>	Max. 8.6 W <sup>3)</sup>
Backup Battery		3V lithium battery CR2032 × 1	
Backup Battery Life		Depends on the temperature used and the conditions of usage, usually about 3 years or more at 25° C	
Operation Temperature		0°C ~ 50°C	
Storage Temperature		-20 °C ~ +60 °C	
Ambient Humidity		10% ~ 90% RH (0 ~ 40° C), 10% ~ 55% RH (41 ~ 50° C), Pollution Degree 2	
Vibration		IEC 61131-2 compliant 5Hz ~ 8.3Hz = Continuous: 3.5mm, 8.3Hz ~ 150Hz = Continuous: 1.0g	
Shock		IEC60068-2-27 compliant 15g peak for 11ms duration, X, Y, Z, directions for 6 times	
Dimensions (W) x (H) x (D) mm		184 x 144 x 50	215 x 161 x 50
Dimensions (W) x (H) mm		172.4 x 132.4	196.9 x 142.9
Weight		800 g	970 g

1) The half-life of a backlight is defined as the original luminance being reduced by 50% when the maximum driving current is supplied to a HMI.

2) Built-in power isolation

3) An isolated power supply is recommended.

4) Some models are in the process of application for UL and KCC certification. For more information, please consult our distributors.

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## Standard Type / Basic Type

Model		Standard Type		Basic Type	
		DOP-107CV	DOP-110CS	DOP-103BQ	DOP-107BV
LCD Module	Display	7" TFT LCD (65,535)	10.1" TFT LCD (65,535)	4.3" TFT LCD (65,535)	7" TFT LCD (65,535)
	Resolution (Pixels)	800 x 480	1024 x 600	480 x 272	800 x 480
	Back Light	LED Back Light Half-life: 20,000 hours under ambient temperature (25° C) <sup>1)</sup>			
	Display area	154.08 x 85.92 mm	226mm * 128.7mm	95.04 x 53.856 mm	154.08mm * 85.92mm
	Back Light Brightness (cd/m <sup>2</sup> )	400 cd / m <sup>2</sup> (Typ.)	300 cd / m <sup>2</sup> (Typ.)	400 cd/m <sup>2</sup> (Typ.)	400 cd / m <sup>2</sup> (Typ.)
MCU		ARM Cortex-A8 (800MHz)			
Flash ROM (Bytes)		256 Mbytes			
RAM (Bytes)		256 Mbytes			
Touch Panel		Four-wire resistor, over > 10,000,000 operated			
Audio Output	Buzzer	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB			
	AUX	N/A	N/A	N/A	N/A
Ethernet Interface		N/A	N/A	N/A	N/A
USB		1 USB Slave Ver 2.0; 1 USB Host Ver 2.0			
SD		N/A	N/A	N/A	N/A
Serial COM Port	COM1	RS-232 (supports hardware flow control) <sup>2)</sup>			
	COM2	RS-232 (supports hardware flow control) / RS-485 <sup>2)</sup>		RS-422 / RS-485 <sup>2)</sup>	
	COM3	RS-422 / RS-485 <sup>2)</sup>	RS-422 / RS-485 <sup>2)</sup>	N/A	
Auxiliary key		N/A			
RTC		Built-in			
Cooling		Natural air circulation			
Certification		CE / UL (please equip Shielding cables and linefilters with capacity of 300ohm/100MHz)			
Waterproof		IP65 / NEMA4 / UL TYPE 4X (indoor use only)			
Operation Voltage <sup>3)</sup>		DC +24V (-15% ~ +15%)(please equip isolated-type power supplies) Supplied by Class 2 or SELV circuit (isolated from MAINS by double insulation)			
Voltage Endurance		AC500V for 1 minute (between charging DC24 terminal and FG terminals)			
Power Consumption <sup>4)</sup>		Max. 8.5 W <sup>3)</sup>	Max. 10.4 W <sup>3)</sup>	Max. 5.67W <sup>3)</sup>	Max. 8.6 W <sup>3)</sup>
Backup Battery		3V lithium battery CR2032 × 1			
Backup Battery Life		Depends on the temperature used and the conditions of usage, usually about 3 years or more at 25° C			
Operation Temperature		0°C ~ 50°C			
Storage Temperature		-20°C ~ +60°C			
Ambient Humidity		10% ~ 90% RH (0 ~ 40° C), 10% ~ 55% RH (41 ~ 50° C), Pollution Degree 2			
Vibration		IEC 61131-2 compliant 5Hz ~ 8.3Hz = Continuous: 3.5mm, 8.3Hz ~ 150Hz = Continuous: 1.0g			
Shock		IEC60068-2-27 compliant 15g peak for 11ms duration, X, Y, Z, directions for 6 times			
Dimensions (W) x (H) x (D) mm		215 x 161 x 50	272 x 200 x 61	137 x 103 x 37.1	215 x 161 x 35.5
Dimensions (W) x (H) mm		196.9 x 142.9	261.3 x 189.3	118.8 x 92.8	196.9 x 142.9
Weight		970 g	1330 g	280g	700 g

1) The half-life of a backlight is defined as the original luminance being reduced by 50% when the maximum driving current is supplied to a HMI.

2) Built-in power isolation

3) An isolated power supply is recommended.

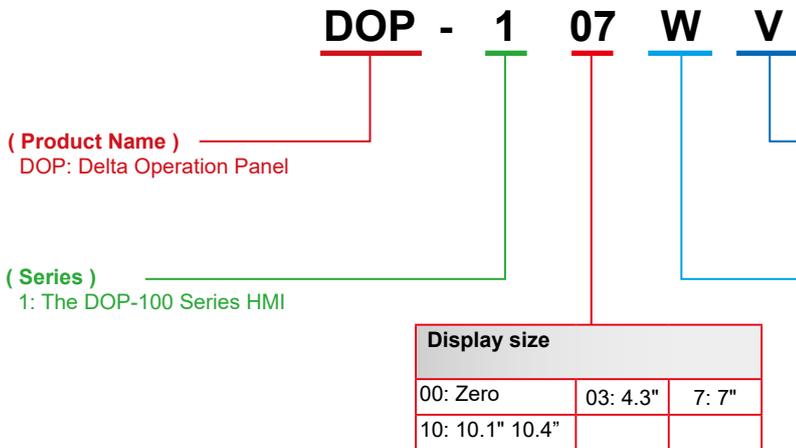
4) Some models are in the process of application for UL and KCC certification. For more information, please consult our distributors.

5) The value of the power consumption indicates the electrical power consumed by the HMI with no peripheral devices connected.

6) The content of this catalogue may be revised without prior notice. Please consult our distributors or download the most updated version at <http://www.deltaww.com>

# Product Information

## Model Description



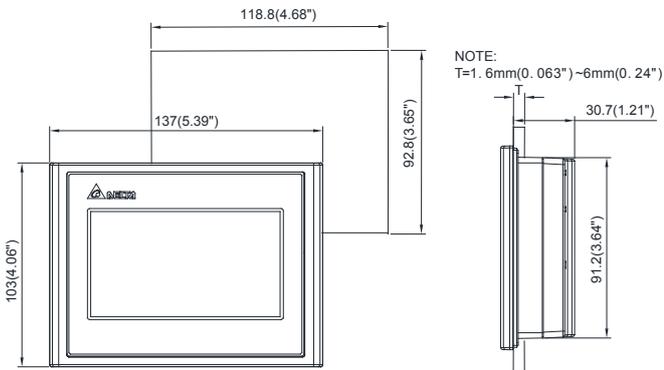
Resolution	
G: SVGA TFT (800x)	Q: WQVGA TFT (480x)
S: WSVGA TFT (1024x)	V: WVGA TFT (800x)
X: XGA TFT (1024x)	Z: No display (Zero)

Type	
B: Basic type	C: Standard type
E: Ethernet type (general frame model)	W: Ethernet type (narrow frame model)

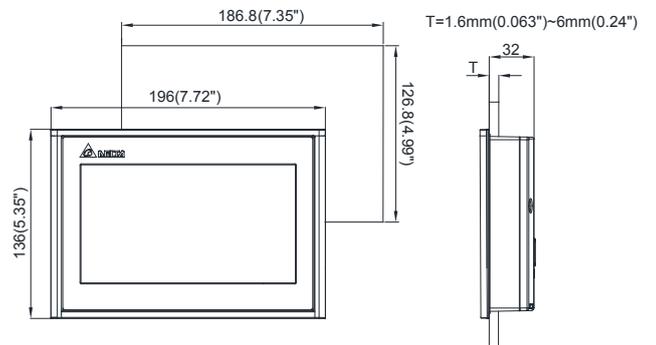
## Dimensions Unit: mm (inches)

### Ethernet Type (Narrow Frame Models)

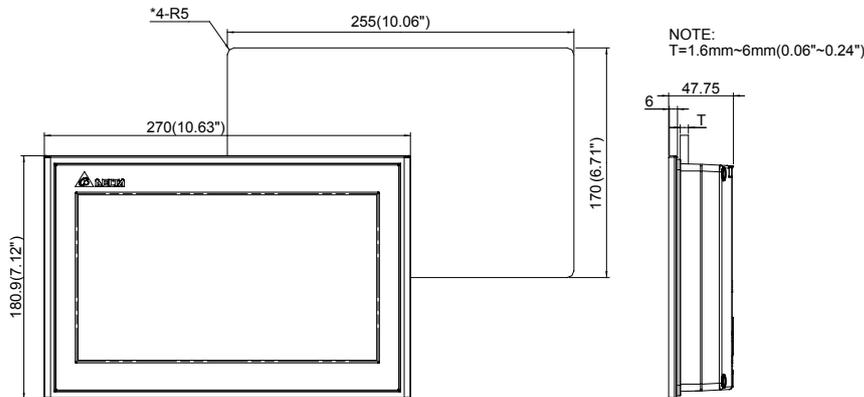
#### • DOP-103WQ



#### • DOP-107WV



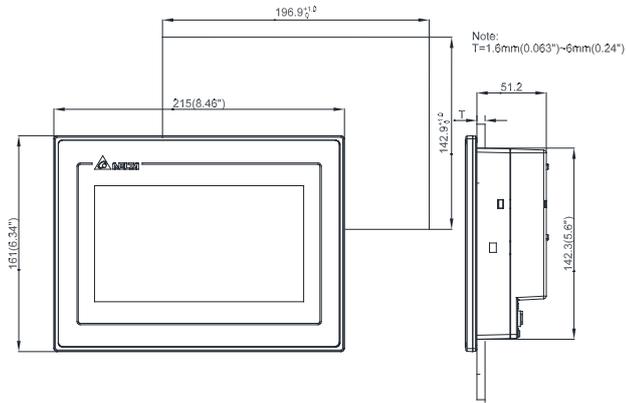
#### • DOP-110WS



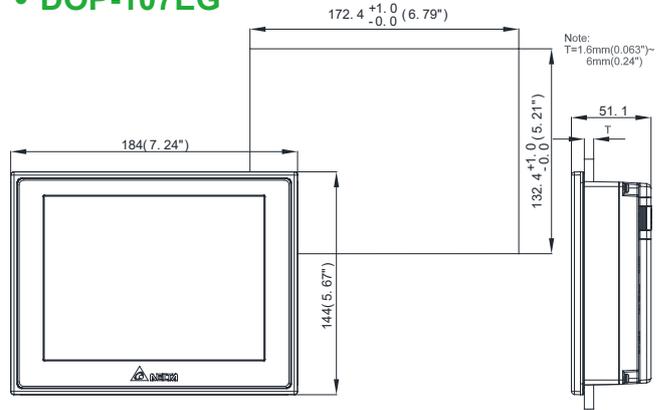
**Dimensions** Unit: mm (inches)

**Ethernet Type (General Frame Models)**

• **DOP-107EV**

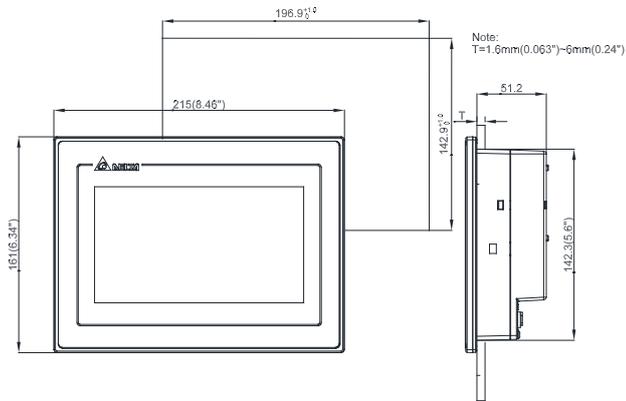


• **DOP-107EG**

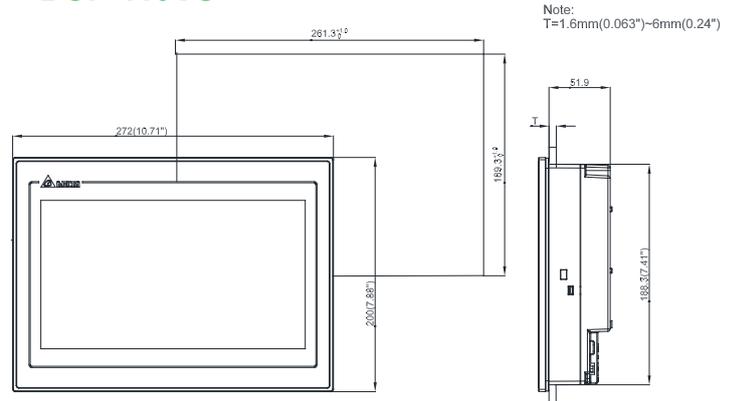


**Standard Type**

• **DOP-107CV**

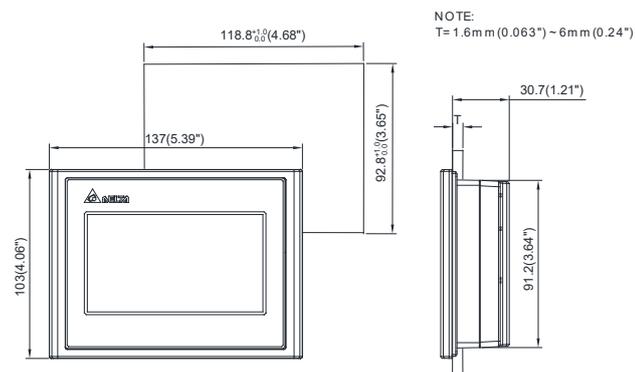


• **DOP-110CS**

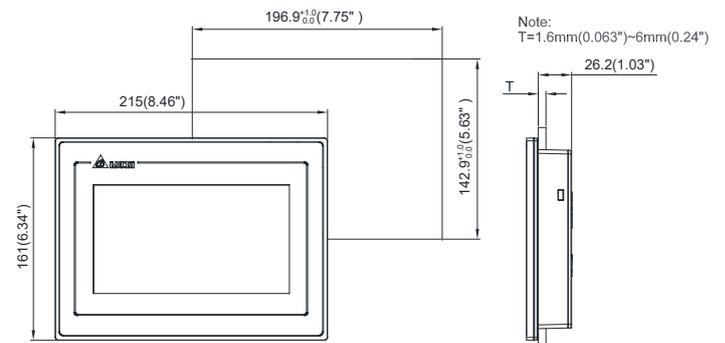


**Basic Type**

• **DOP-103BQ**



• **DOP-107BV**



# Global Operations

## ASIA (Taiwan)



**Taoyuan Technology Center (Green Building)**



**Taoyuan Plant 1**



**Taoyuan Plant (Diamond-rated Green Building)**

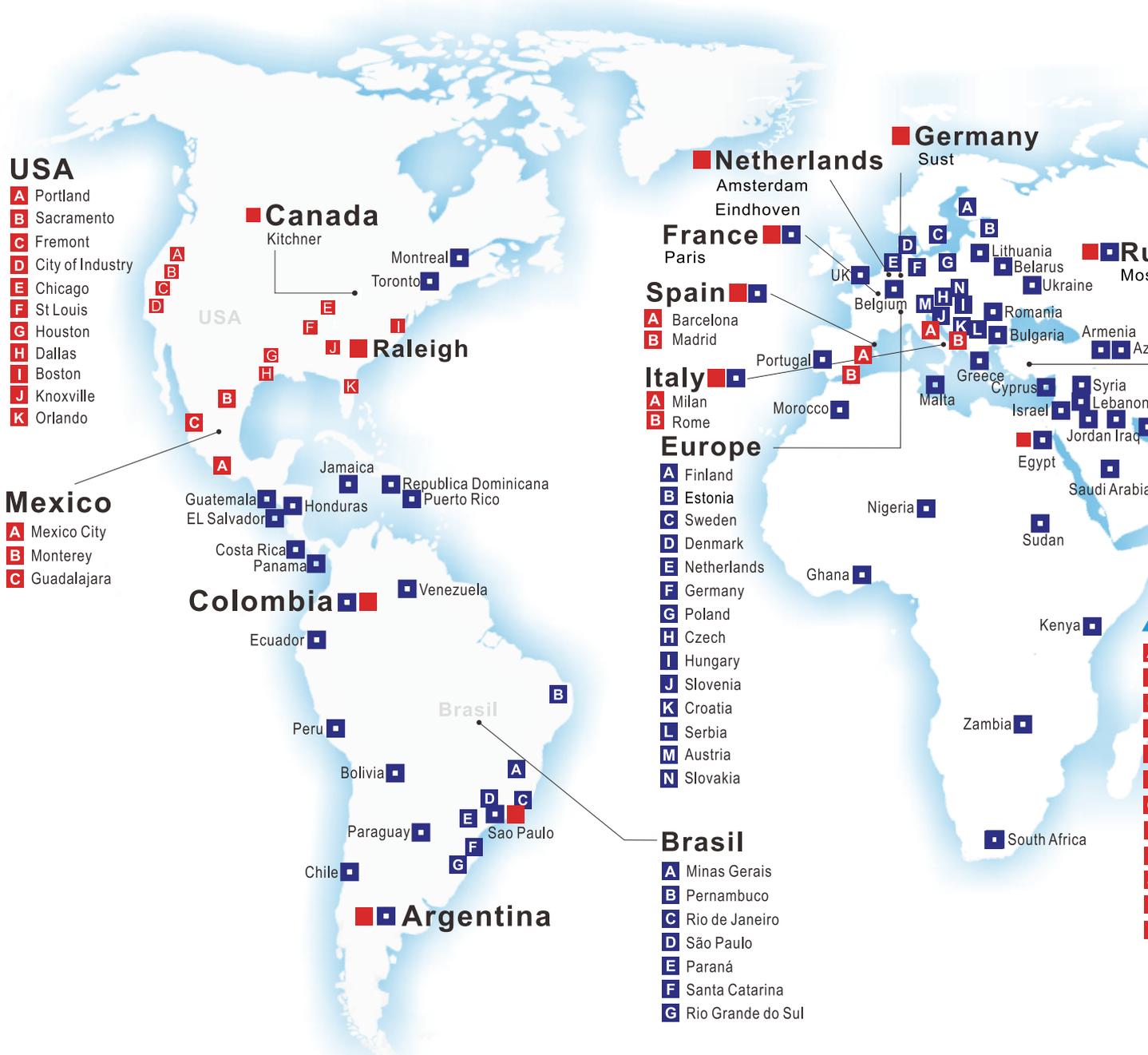
## ASIA (China)



**Wujiang Plant 3**



**Delta Electronics**



**ASIA (Japan)**



Tokyo Office

**ASIA (India)**



Rudrapur Plant (Green Building)

**EUROPE**



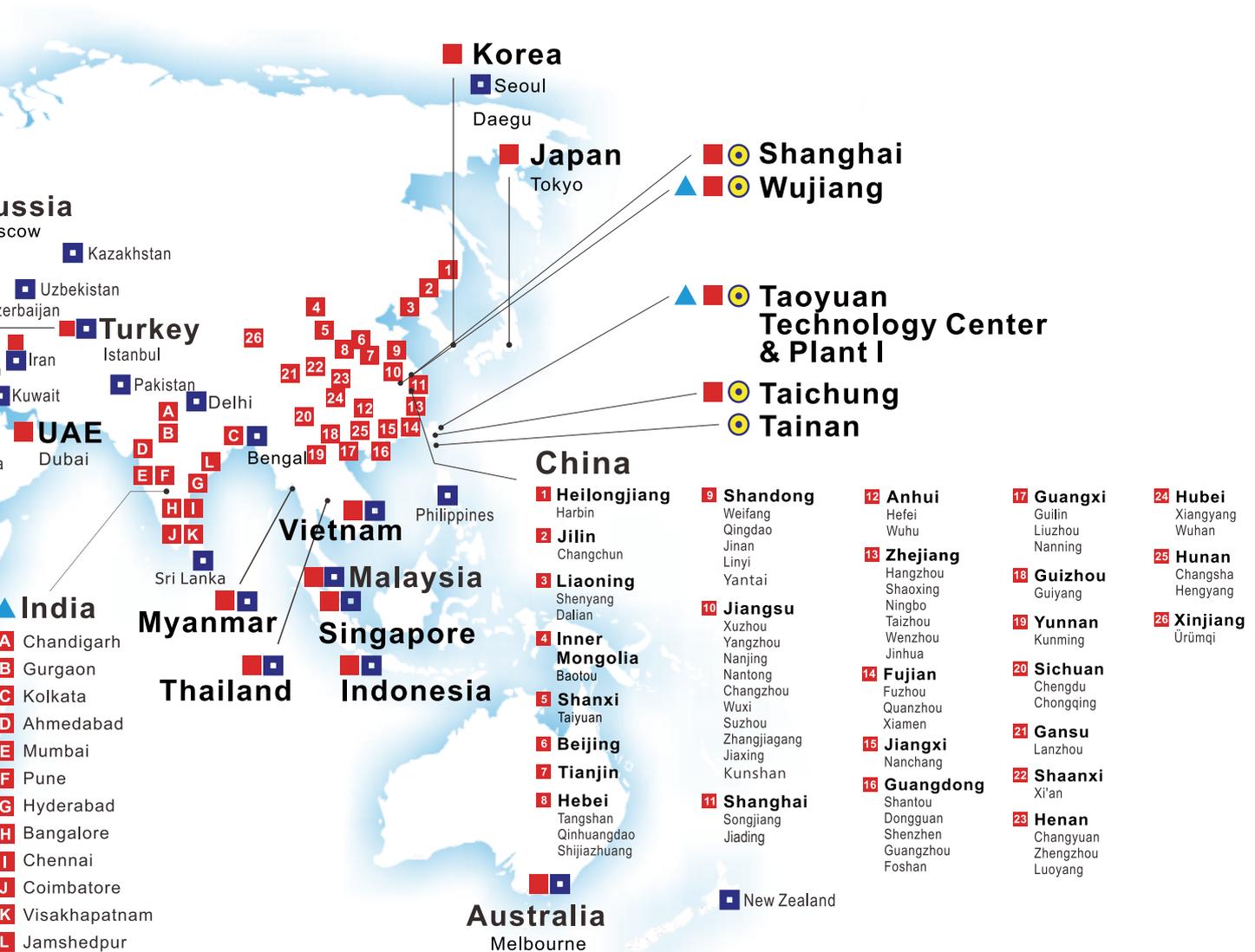
Amsterdam, Netherlands

**AMERICA**



Research Triangle Park

▲ Factories 4 ■ Branch Offices 89 ● R&D Centers 5 ■ Distributors 635





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## Industrial Automation Headquarters

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