

Automation for a Changing World

# Delta Human Machine Interface DOP Series





# One Touch Gives You Limitless Possil

Meets Customer Needs. Satisfies a Variety of Applications. Provides Multiple Functions. Creates

### **Ener Envi**

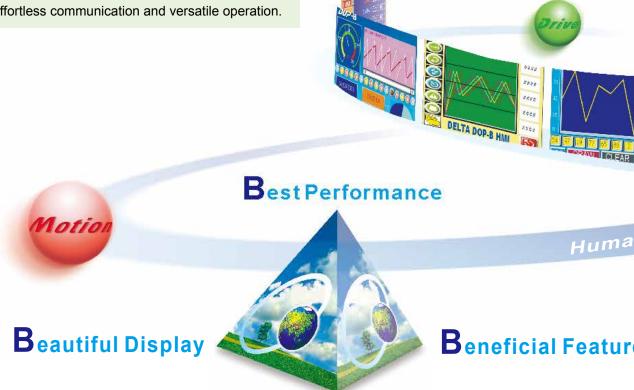
All mode provide mercury and prof

### A Wide Range of Options

Three serial communication interfaces (RS-232/RS-422/RS-485), USB disk, Ethernet, audio output, SD card and more are supported for various applications.

### **Powerful Controller Drivers Support**

Not just Delta industrial automation products, but more than 30 brands, and over 100 models of PLCs or controllers can be connected for effortless communication and versatile operation.





# gy Saving and ronmental Automation

els are equipped with LED backlights which energy-efficient lighting that is made without reduces energy use and CO2 emissions, ects the environment.

### **High Quality and Full-Color Display**

A full 65,536-color display is available on all models. With a whole new 2D drawing technique, the screen resolution is enhanced for more realistic images and for more colorful and vivid displays.





# **Product Line-up**

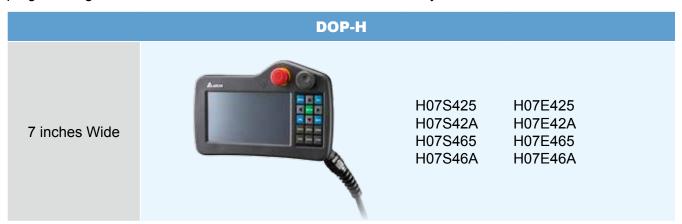
### **DOP-B** series

The DOP-B series provides various types and different sizes of touch panel HMIs with multiple dimensions and colors, and also offers fast and convenient control functions to meet the diverse application requirements demanded of industrial automation machines.

		DO	P-B		
4.3 inches Wide	Auto	B03S211 B03E211	7 inches	Auris	B07S515 B07E515 B07PS515
5.6 inches	Ann	B05S111	8 inches	A	B08S515 B08E515
	### ## # # # # # # # # # # # # # # # #	B07S401K	10.1 inches	Auto	B10S411 B10S615 B10E615
7 inches Wide		B07S411K	10.4 inches	Augus	B10S511 B10VS511 B10PE515
	Auco	B07S410 B07S411 B07S415 B07E415 B07PS415			

### **DOP-H Series**

The DOP-H series provides handheld type HMIs and customized teaching pendants for controlling and programming the motion of robot arms and other motion control systems.



### **DOP-W Series**

The DOP-W series offers large-size HMIs that come with high resolution and high brightness touch screens, and should be your first choice to meet customer needs for a wide range of high-end industrial automation applications.

	DOP-W	
10.4 inches	Air	W105B
12 inches	Borns .	W127B
15 inches		W157B





# **High Quality Display**



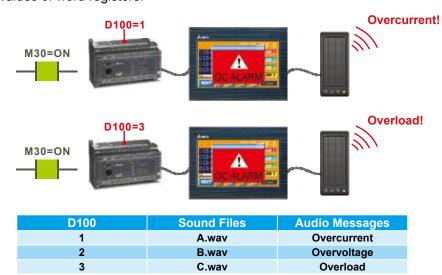
65,536-color high quality TFT display offers more realistic and vivid images to capture and visualize system and manufacturing processes more quickly.

## **Audio Output Interface**

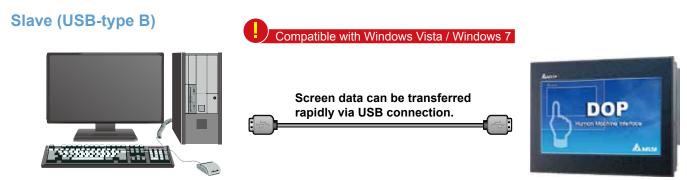


In case of errors, an alarm alerts users via an audio message in real time.

► As the broadcast of alarms is triggered by the corresponding bit, the alarm messages can be played and output in different sound files by setting values of word registers.



# **Supports Various Peripherals via USB Hub**



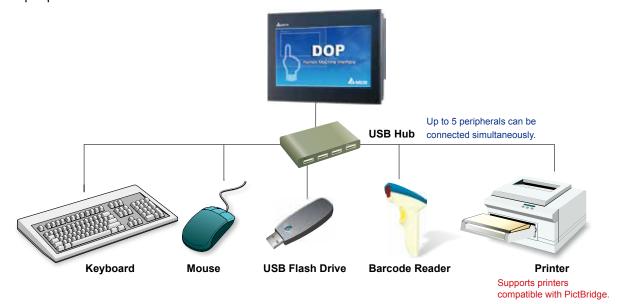
Up to 480Mbps high-speed data transfer via USB v2.0



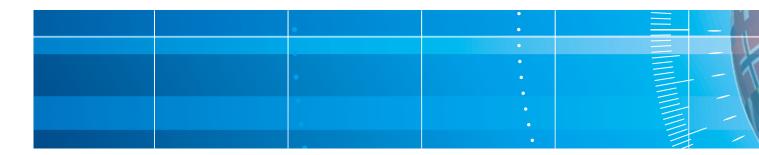
Using the bypass function, enable monitoring functions and modify PLC programs directly via the USB connection.

### Master (USB-type A)

Various peripherals can be connected via a USB Hub.







# SD Card / USB Disk Versatile Storage Interface

Exploiting the convenience of an SD card or USB disk, screen data transfer and collection can be quickly performed and the storage capacities of the HMI can be easily increased. No need to worry about data capacity of excessive history and recipe data

▶ SD card and USB disk are in FAT32 format, fully compatible with Microsoft Windows and allow filenames that exceed eight characters in length



The recipe data can be saved in CSV format and easily edited on an external PC in Excel to effectively save PLC memory.



History and alarm information can also be saved in CSV format and stored to the SD card / USB disk.

- Multiple project screen data can be saved in SD card / USB disk simultaneously and transferred to HMI. No need to connect to a PC
- The data saved in an SD card / USB disk can be encrypted and the number of copies can be limited to protect the programs from unauthorized use



- ▶ PLC ladder diagrams can be transferred and backed up via SD card / USB disk even in a location where an external PC is not available
- SD card / USB disk are capable of storing several PLC ladder diagrams





# **Multilingual Display**

Up to 32 languages are available. No need to redesign the screen data! A benefit for marketing the equipment to manufacturers and end users around the world.

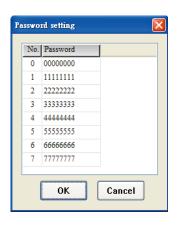




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# **Password Settings**

Provides 8 levels of passwords to set user security and prevent improper use. Only the security level that is equal to or higher than the current setting can use the element.





### **Element Invisible Function**

The element on the screen can be hidden by triggering the corresponding bit.



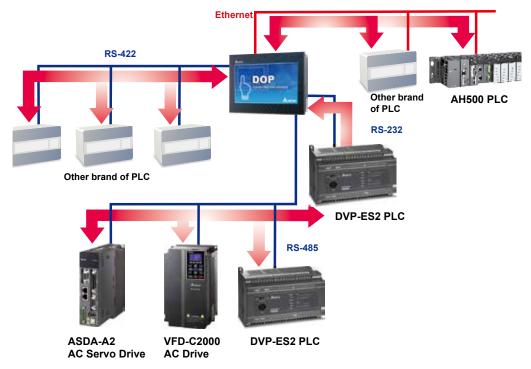




## **Provides Diverse Communication Interfaces**

### Easy to communicate with more than 30 brands of PLCs/Controllers

All DOP series models support RS-232/485/422 communication interfaces and over 20 different PLC/Controller drivers. With the aid of an Ethernet interface, it is possible to use four communication interfaces at the same time, easily connecting to various industrial automation devices for a complete communication network link managed by Delta's new DOP series.



### **VGA Model**

DOP-B10VS511 supports VGA video input which integrates live video and HMI display into one unit. Incorporated with Delta's DMV series machine vision system, Delta offers an integrated solution that delivers precise and reliable control to meet the needs of industry upgrades and bring benefits to our customers around the world.



# Integrates Delta Professional Functions (PS Models Only):

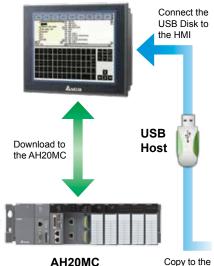
**Servo Drive** 

### **G-Code**

- Supports Delta's motion controllers: DVP-10MC / DVP-20PM / AH20MC
- Capable of viewing and changing the G-code files with the HMI
- Supports serial and Ethernet communications

**Drawing Machine** 





DOP-B07PS515



**Create Autocad files** 



N01 G00 Z1.00000 N10 G64 N20 G00 X51.41791 Y6.46013 N30 G01 Z-0.10000 F1000.00 N40 G01 X51.43897 Y6.57145

N50 G01 X51.46328 Y6.60449 N60 G01 X54.19628 Y9.64749 N70 G01 X54.54002 Y10.03007 N80 G01 X54.61772 Y10.20689

N80 G01 X54.61772 Y10.20689 N90 G01 X54.69736 Y10.58087 N100 G01 X55.03397 Y11.59650 N110 G01 X55.22240 Y12.08614 N120 G01 X55.52968 Y12.78773

### **Electronic Cam (E-Cam) Curve Table**

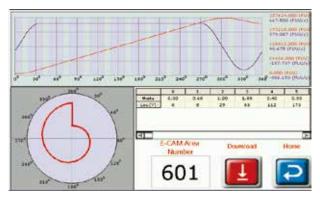
- Supports ASDA-A2 series servo drives
- A personal computer is not required. Electronic cam curves can be generated on HMI and downloaded to the ASDA-A2 series servo drive directly

# Electronic Cam Curve

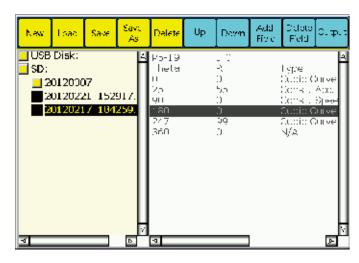
USB disk

# Supports E-Cam table macro for making E-Cam curve on HMI

- Auto rotary shear with sealing zone
- Indirect printing
- Auto rotary shear cos compensation



### Supports cubic curve manual creation





### **DOP-W Features**



### The Ultimate in Industrial Versatility

- ▶ 1GHz high speed processor for higher computing performance
- ▶ Aluminum enclosure: greater vibration resistance and higher tolerance for ambient environments compared with plastic enclosure.
- ► The enclosure with dark gray mold texturing is easily cleaned and ideal for the medical and food sectors.
- ► 1024 x 768 pixels high resolution and high brightness display (W127B: 500 cd/m², W157B: 450 cd/m²)
- ▶ 256MB Flash ROM
- ▶ Highly reliable touch panel with min. 10,000,000 touches

### **Front Speaker**

- ► The built-in stereo amplifying speaker provides efficient alarm notifications. No additional speaker is required.
- ▶ Apart from replacing general alarm with buzzers, functions for playing recorded voice and reminders are available for multiple applications.
- Mechanism design breakthrough. The front panel including the front speaker has acquired the IP65 waterproof certificate.





### **Multiple Peripheral Interfaces**

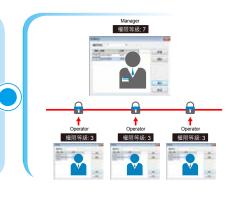
- Supports 2 COM Ports
- Supports 2 Ethernet Ports
- Supports 3 USB Host 2.0 Ports
- Supports SD card
- Apart from traditional mounting, DOP-W also supports the VESA standard mounting interface making wall mounts easier.

\*VESA mounting interface is only available on devices above 12 inches.

### Multi-User Authority Management

This function allows users to assign authority levels and register passwords to set permissions for different user groups for security control. No need for third-party configuration and set-up costs.

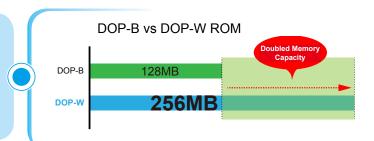
- 8 levels of user authority Level: 0 ~ 7
- 8 sets of user accounts with passwords for each user authority





### **High-Capacity Memory**

Increased memory capacity stores more nonvolatile data, such as alarm messages and historical records than ever before for power-loss protection.





# **More Powerful Remote Monitoring Function**

- Compatible with eRemote
- Supports VNC Server
  - Monitoring by eRemote software or web browser on PC
  - ▶ Apps for eRemote or VNC Client support Apps on Android devices
  - ▶ VNC Client supported Apps on iOS devices
    - \* JAVA is required in web browsers.

### **Two Individual Ethernet Ports**

➤ Two individual Ethernet ports are equipped as standard, one is for HMI communication and the other is for external I/O for quick and easy integration.







### **Multilingual Display**

- In addition to English and numbers, 16 languages are supported for a more localized interface
  - \* Supports English, Traditional Chinese, and Simplified Chinese only during the launching period.
  - \* Other languages such as Arabic, French, German, Hebrew, Hindi, Portuguese, Spanish, Japanese, Korean, Thai, Turkish, Russian, and Persian are continually added.

### **Video Player**

► A new video player with self-defined playlist allows users to manage the list based on different applications.





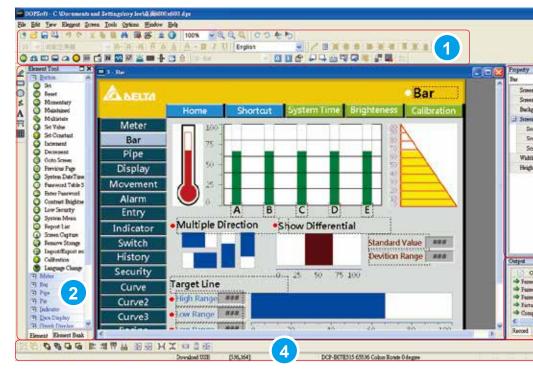
\* Supported Format: MPEG1, MPEG2, WMV





### **DOPSoft**

The all new and upgraded configuration software provides complete functions and a user-friendly operator interface. Make editing easier than ever with a whole new level of design.



### 1) Toolbar

Actions such as edit, save, upload and compile can be executed easily just by clicking the attractive and easy-to-see icons on the toolbar.

### 2) Element Tool Window

The Element Tool Window provides a wide variety of element icons for selection. Use the mouse to select the desired element icon and drag it onto the work place to create a new element.

### 3) Output Window

The Output Window displays all the editing actions and output messages when the compile function is enabled. Once an error occurs, the error messages are displayed in Output Window as well.

### 4 Layout Toolbar

The Layout Toolbar offers Bring to Front, Send to Bottom, Align, Across / Down Space Evenly, Make Same Size and other functions for the benefit of creating intricate and beautiful elements.

### 5) Property Table

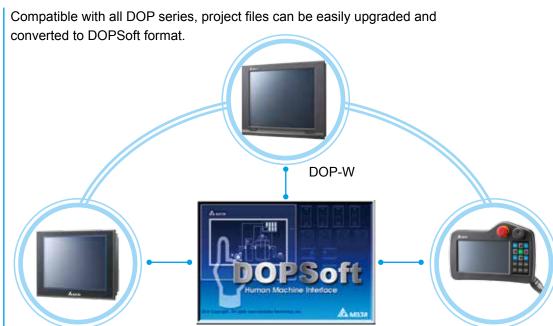
The Property Table displays the element property settings for each element.

### **Pict**

Newly dea

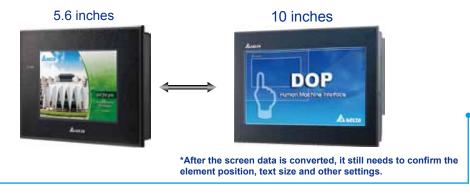


## **Convenient Screen Data Conversion**



The screen data can be converted to different models even if the display size is not the same. The same project can be applied on different models.

**DOPSoft** 



### ure Bank

signed picture bank offers more colorful and elements.



DOP-B

# Minimum System Requirements of DOPSoft

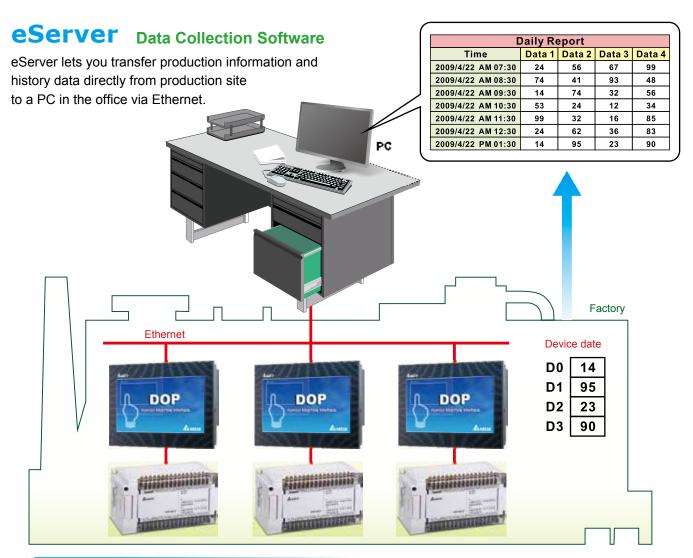
Hardware / Software	System Requirements
CPU	Pentium4 1.6GHz or greater is recommended
Memory	2G MB and above is recommended
Hard Disk	Capacity: 400MB and above
Monitor	Supports resolution: 800 x 600 or higher full-color display
Printer	Printer compatible with Windows 2000 Windows XP / Windows Vista / Windows 7
Operating System	Windows 2000 / Windows XP Windows Vista / Windows 7

<sup>\*</sup>Users can download the DOPSoft configuration software and the user manual at Delta's website via the following link: http://www.deltaww.com



DOP-H

# Solution for Constructing a Network between Office and Production Site via Ethernet



### 1) Excel Sampling Data

- Collected data can be saved in user-defined Excel files according to purpose and to easily create production reports
- ▶ If the formulas in the Excel file are set in advance, the production data, i.e. defective rate, average working hours and capacity utilization rate, and more can be calculated in real time while production data is recorded
- ▶ Production data can be saved in daily reports, weekly reports, monthly reports, and others automatically under different settings.

### 2) Database Sampling Data

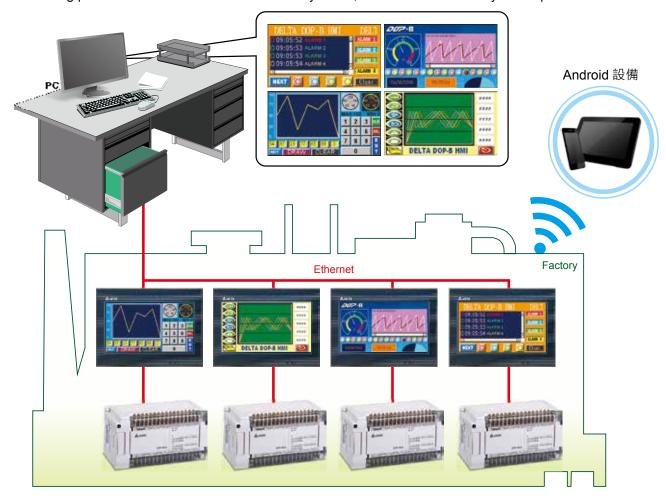
▶ Users can access any database via ODBC (Open Database Connectivity) interface

### 3) Recipe Data Transfer

Users can transfer and backup the recipe data via eServer easily

### **eRemote** Remote Control Software

eRemote lets you view and monitor the same screen shown on the HMI at the production site, and control the manufacturing process via Ethernet. No matter where you are, remote control is easily accomplished.



# Minimum System Requirements for eServer / eRemote

Hardware / Software	System Requirements
CPU	Pentium 4,1.6GHz or greater is recommended
Memory	2G MB and above is recommended
Hard Disk	Capacity: 100MB and above
Monitor	Supports resolution: 1024 x 768 or higher full-color display.
Printer	Printer compatible with Windows 2000 / Windows XP / Windows Vista / Windows 7
Operating System	Windows 2000 / Windows XP / Windows Vista / Windows 7

<sup>\*</sup>Users can download the eServer / eRemote software and the user manual at Delta's website via the following link: http://www.deltaww.com

System Re		
Operating System	Android 4.1.2 and later versions	o Loca
Storage Capacity	860 KB and above	



# **Specifications**

### **DOP-B Series**

	MODEL	DOP-B03S211	DOP-B03E211	DOP-B05S111	DOP-B07S410	DOP-B07S411	DOP-B07S401K	DOP-B07S415	DOP-B07PS415	DOP-B07E415	DOP
	Display Size and Type			5.6" TFT LCD			DOP-B07S411K				
	Display Colors	4.5 11	4.3" TFT LCD 5.6" TFT LCD 7" Widescreen TFT LCD								
	Resolution (pixels)	480 x 272		320 x 234			900	x 480			
LCD MODULE		400 X 272		320 X 234			000	X 40U			
	Backlight	000	400	000	050	050	050	050	050	252	
	Luminance (cd/m²)  Backlight Life (hours)	280	400 10,000	200	250 20,000	250 20,000	250 20,000	350 20,000	350 20,000	350 20,000	2
	MCU										
Flas	h ROM (Bytes)	128	MB	128 MB	4MB			128 MB			
F	RAM (Bytes)		64MB				64	IMB			
	p Memory (Bytes)		16MB		32k			16MB			
	Buzzer										M
	AUX	N	/A	N/A			N/A			Stereo output	
	Ethernet	N/A	1 Port (Note 2)	N/A			N/A			1 Port (Note 2)	
N	lemory Card	N	/A	N/A		N/A		SD	card (supports SD	HC)	S
	USB		USB Host Ver 1.1 USB Client Ver 2		1 USB Client Ver 2.0						
Serial	СОМ1		oorts hardware I) / RS-485	RS-232 (Supports hardware flow control) <sup>(Note 2)</sup>	RS-232 (Supports hardware flow control)/ RS-485 / RS-422		oorts hardware control)	RS-2	232 (Supports hard flow control) <sup>(Note 2)</sup>	lware	
COM Port	COM2	RS-422 / RS-S485	RS-422 / RS-485 <sup>(Note 2)</sup>	RS-232 / RS-485 (Note 2)	N/A	RS-232	/ RS-485	RS-232	/ RS-422 / RS-	485 <sup>(Note 2)</sup>	
	СОМЗ	N	/A	RS-422 / RS-485 <sup>(Note 2)</sup>	N/A	RS-422	/ RS-485	RS-232	2 / RS-422 / RS-485 <sup>(Note 2)</sup>		
	VGA Input	N	/A	N/A			N	N/A			
	ta Professional gration Function	N	/A	N/A		١	N/A		YES	N/A	
F	unction Key	N	/A	N/A	N	/A	8		N/A		
Perpetu	al Calendar (RTC)										
Co	ooling Method										
Sa	ifety Approval										
Wat	erproof Degree										
Opera	tion Voltage (Note 3)										
Volta	age Endurance									AC500V f	or 1 m
Power	Consumption (Note 5)	2.64W	2.64W	3.0W	3.5 W	4W	4 W	5 W	5W	7.5 W	7
Ba	ackup Battery										
Back	kup Battery Life								It d	epends on the ter	nperat
Ор	eration Temp.										
St	torage Temp.										
Am	bient Humidity									10% ~ 90%	6 RH (
	Vibration								IE	C 61131-2 compli	ant 5H
	Shock									IEC 60068-2-2	7 com
(W)	Dimensions x ( H ) x ( D ) mm	129 × 103 × 39	129 x103 × 39	184 × 144 × 50	215 × 161 × 35.3	215 × 161 × 50	215 × 161 × 50	215 × 161 × 50	215 × 161 × 50	215 × 161 × 50	184
	Panel Cutout V)x(H)mm	118.8 × 92.8	118.8 × 92.8	172.4 × 132.4	196.9 × 142.9	196.9 × 142.9	196.9 × 142.9	196.9 × 142.9	196.9 × 142.9	196.9 × 142.9	172
	Weight	Approx. 230 g	Approx. 264 g	Approx. 670 g	Approx. 700 g	Approx. 820 g	Approx. 820 g	Approx. 970 g	Approx. 970g	Approx. 970 g	App

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

2) With built-in isolated power circuit.

3) Please use isolated power supply.

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 HMI with no peripheral devices connected.

To ensure normal operation, it is recommended using a power supply with a capacity 1.5 ~2 times the value of the power consumption.

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

-B07S515	DOP-B07PS515	DOP-B07E515	DOP-B08S515	DOP-B08E515	DOP-B10S511	DOP-B10VS511	DOP-B10E515	DOP-B10PE515	DOP-B10S411	DOP-B10S615	DOP-B10E615
	7" TFT LCD		8" TF1	LCD		10.4" T	FT LCD		10.1	" Widescreen TFT	LCD
	65536 colors										
800 x 600		800 x 600			800	x 600		800 x 480	800 x 480 1024 x 600		
	LED Back Light										
450	450	450	500	500	300	300	300	300	300	200	200
0,000	20,000	20,000	25,000	25,000	10,000	10,000	10,000	10,000	20,000	15,000	15,000
	400 MHz										
	128 MB		128	MB		128	MB			128 MB	
	64MB		641	ИB		64	MB			64MB	
	16MB		161	ИB		16	MB			16MB	
ılti-Tone Fre	quency ( 2K ~ 4K	Hz ) / 85dB									
N/	Α	Stereo output	N/A	Stereo output	N	/A		output	N	/A	Stereo output
N/	Α	1 Port (Note 2)	N/A	1 Port (Note 2)	N	/A	1 Por	t (Note 2)	N	/A	1 Port (Note 2)
D card (sup	ports SDHC)	SD card (supports SDHC)	SD card (sup	ports SDHC)	N	//A	SD card (sup	oports SDHC)	N/A	SD card (sup	ports SDHC)
		1 USB Hos	t Ver 1.1 / 1 USB C	lient Ver 2.0							
RS-23	32 (Supports hards	ware	RS-232 (Supp flow conf		RS-232 (Supports hardware flow control)	RS-2	32 (Supports hard flow control) <sup>(Note 2)</sup>	lware	RS-232 (Supports hardware flow control)	RS-232 (Supp flow con	
RS-	-232 / RS-485 <sup>(Not</sup>	e 2)	RS-232 / RS-42	2 / RS-485 <sup>(Note 2)</sup>	RS-232 / RS-485	RS-232 / RS-485 <sup>(Note2)</sup>	RS-232 / RS-42	22 / RS-485 <sup>(Note 2)</sup>	RS-232 / RS-485	RS-232 / RS-42	2 / RS-485 <sup>(Note 2</sup>
RS-	-422 / RS-485 <sup>(Not</sup>	e 2)	RS-232 / RS-42	2 / RS-485 <sup>(Note 2)</sup>	RS-232 / RS- 422 / RS-485	RS-232 / RS- 422 / RS- 485 <sup>(Note2)</sup>	RS-232 / RS-42	22 / RS-485 <sup>(Note 2)</sup>	RS-232 / RS-422 / RS-232 / RS-422 / RS-485 RS-485		2 / RS-485 <sup>(Note 2</sup>
	N/A		N	Α	N/A	Resolution 800x600 pixels Scanning Frequency 56 Hz / 60 Hz	N	N/A		N/A	
N/A	YES	N/A	N	Ά	N/A YES				N/A		
	N/A		N	Ά	N/A			N/A			
	Built-in										
Na	atural air circulatio	n									
	CE / UL										
II	P65 / UL type 4x										
DC +24	V ( -10% ~ +15%	) <sup>(Note2)</sup>									
nute (betwe	en charging DC24	terminal and FG	terminals)								
.68 W	7.68W	7.68W	5.2W	7.8W	6.1 W	6.1W	9.6W	9.6W	6.6W	12 W	12W
3V lithi	ium battery CR203	32 x 1									
re used and	d the conditions of	usage, about 3 y	ears or more at 25	°C							
	0°C ~ 50°C										
-20°C ~ +60°C											
~ 40° C), 10% ~ 55% RH (41 ~ 50 °C), Pollution Degree 2											
~ 8.3Hz = Continuous: 3.5mm, 8.3Hz ~ 150Hz = Continuous: 1.0g											
liant 15g pe	ak for 11 ms dura	tion, X, Y, Z direc	tions for 6 times								
144 × 50			227.1 × 174.1 × 61							272 × 200 × 61	272 × 200 × 61
4 × 132.4	172.4 × 132.4	172.4 × 132.4	219.4 × 166.5	219.4 × 166.5	285.2 × 210.2	285.2 × 210.2	285.2 × 210.2	285.2 × 210.2	261.3 × 189.3	261.3 × 189.3	261.3 × 189.3
ox. 800 g	Approx. 800 g	Approx. 800 g	Approx. 1226 g	Approx. 1228 g	Approx. 1700 g	Approx. 1700 g	Approx. 1700 g	Approx. 1700 g	Approx. 1520 g	Approx. 1520 g	Approx. 1520 (

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

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3) Please use isolated power supply.

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# **Specifications**

### **DOP-H Series**

	Model	DOP-H07S425 DOP-H07S42A	DOP-H07S465 DOP-H07S46A	DOP-H07E425 DOP-H07E42A	DOP-H07E465 DOP-H07E46A			
	Display Size and Type		7" Widescre	en TFT LCD				
	Display Colors	65536 colors						
LCD	Resolution (pixels)	800 x 480						
MODULE	Backlight	LED Back Light						
	Luminance (cd/m²)		45	50				
	Backlight Life (hours) (Note 1)		20,	000				
	MCU		400	MHz				
Fla	ash ROM (Bytes)		128	MB				
	RAM (Bytes)		64	MB				
Back	cup Memory (Bytes)		16	MB				
	Buzzer		Multi-Tone Frequency	( 2K ~ 4K Hz ) / 80dB				
	Audio Output		N	/A				
	USB		1 USB Clie	ent Ver 2.0				
	SD		SD card (sup	ports SDHC)				
8	Serial COM Port	RS-422 /	RS-485 <sup>(Note 2)</sup>	N	'A			
	Ethernet	N	I/A	1 Port	S <sup>(Note2)</sup>			
	Function Key		1	5				
Cal	ble Length & Type			Name: 5 - 5 m Name: A - 10 m				
E	Emergency Stop	A-contact: 1 / B-contact: 1 Rated voltage: DC 30V Maximum rated current: 1A Minimum allowable load: DC 5V/1 mA Complies with IEC60947-5-1, EN60947-5-1, IEC60947-5-5, EN60947-5-5, UL 508, and CSA C22.2 No.14, GB 14085.5						
3-Posi	tion Operation Switch	•	OC 3 V/5mA 7-5-8, IEC60947-5-1, EN60947 e with ISO12100-1, -2/EN12100					
	Handwheel	N/A	Rated Voltage: <dc 24v="" in<br="">Resolution: 50(P/R) Output Pulse: Square Output Phase: A, B Phase difference of A and B: 90° ± 45° Max. Frequency response: 200 Hz</dc>	N/A	Rated Voltage: <dc 24v="" in<br="">Resolution: 50(P/R) Output Pulse: Square Output Phase: A, B Phase difference of A and B: 90° ± 45° Max. Frequency response: 200 Hz</dc>			
Pe	erpetual Calendar		Bui	lt-in				
(	Cooling Method		Natural	cooling				
5	Safety Approval	CE						
Waterprod	of Level of Panel Display	IP55						
	ration Voltage (Note3)		DC +24V (±15%) (with built-	in isolated power circuit)(Note2)				
	oltage Endurance		AC500V for 1 minute (between	en charging (DC24V terminal) erminals)				
Powe	r Consumption (Note 5)							
	Backup Battery	3V lithium battery CR2450 × 1						
Ва	ckup Battery Life	About 5 years or more at 25oC but subjects to the temperature and the conditions during usage.						
	ration Temperature	0°C ~ 40°C						
Sto	rage Temperature	-20 °C ~ +60 °C. 10% ~ 90% RH						
	rating Environment	10% ~ 90	0% RH【0~40°C】; 10%~55		Degree 2			
	Vibration		ns to IEC61131-2; Continuous: 5		•			
	Shock		rms to IEC60068-2-27; 11ms, 1					
Dimensions	(W) × (H) × (D) mm		7.4 × 170.3 × 71.8 (Emergency s					
ZIIIIOIIOIOII3	Weight	20	, , ,	e excluded)	,			
	J		when the maximum driving current i	•				

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

2) With built-in isolated power circuit.

3) Please use isolated power supply.

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 HMI with no peripheral devices connected.

To ensure normal operation, it is recommended using a power supply with a capacity 1.5 ~2 times the value of the power consumption.

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

### **DOP-W Series**

	MODEL	DOP-W105B	DOP-W127B	DOP-W157B		
	Display Size and Type	10.4" TFT LCD	15" TFT LCD			
	Display Colors	65536 colors				
LOD MODULE	Resolution (pixels)	800 x 600	1024	x 768		
LCD MODULE	Backlight		LED Back Light			
	Luminance (cd/m²)	300	500	450		
	Backlight Life (hours)(Note 1)	10,000	30,000	100,000		
	MCU		1 GHz			
Flas	sh ROM (Bytes)		256 MB			
ı	RAM (Bytes)		256 MB			
Ва	ackup Memory	800000	numbers of data (alarm data + historic	al data)		
	Buzzer	Mul	ti-Tone Frequency (2K~4KHz) / 8	0dB		
ļ	Audio Output	Stereo output	Stereo output / Bui	It in 1.5W Speaker		
	USB	1 USB Host Ver 2.0	3 USB Ho	est Ver 2.0		
	SD		SD card (supports SDHC)			
	COM1	N/A				
Serial COM Port	COM2	RS-232 / RS-422 / RS-485 <sup>(Note 2)</sup>				
	COM3	RS-232 / RS-422 / RS-485 <sup>(Note 2)</sup>				
	Ethernet	2 Ports <sup>(Note2)</sup>				
Perpeti	ual Calendar (RTC)	Built-in <sup>(Note5)</sup>				
C	ooling Method	Natural air circulation				
Sa	afety Approval	CE / UL				
	terproof Degree	IP65 / UL type 4x IP65 / UL type 1				
Opera	ation Voltage (Note3)	DC +24V ( -10% ~ +15% )				
Volt	tage Endurance	AC500V for 1 minute (between charging (DC24V terminal) and FG terminals)				
Power	Consumption (Note 6)	13.5W	18.5W	21.6W		
В	ackup Battery	Uses a gold-cap	acitor instead of a battery, no need to	replace batteries		
Вас	kup Battery Life	It can keep the RTC working at least seven days in a working environment where the conditions do not exceed the specifications for DOP-W series.				
Opera	ation Temperature	0°C ~ 50°C				
Stora	age Temperature		-20 °C ~ +60 °C, 10% ~ 90% RH			
Ambient Humidity		10% ~ 90% RH [0 ~ 40 °C], 10% ~ 55% RH [41 ~ 50 °C] Pollution Degree 2				
Vibration		IEC61131-2 compliant $5Hz \le f$	< 8.3Hz = Continuous: 3.5mm, 8.3Hz	≦f≦150Hz = Continuous: 1.0g		
	Shock	IEC 60068-2-27 compl	iant 15g peak for 11 ms duration, X, Y,	Z directions for 6 times		
( W )	Dimensions x ( H ) x ( D ) mm	299 × 224 × 46.8	313 × 239.5 × 67.5	384.4 × 295.8 × 67.8		
	Panel Cutout W)x(H)mm	285.2 × 210.2	302.7 × 228.7	372.4 × 283.7		
	Weight	Approx. 1750 g	Approx. 2830 g	Approx. 3880 g		

<sup>1)</sup> The half-life of backlight is defined as original luminance being reduced by 50% when the maximum driving current is supplied to HMI.
2) With built-in isolated power circuit.
3) Please use isolated power supply.
4) Some models are in the process of application for UL and KCC certification. For more information, please consult our distributors.

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

To ensure normal operation, it is recommended using a power supply with a capacity 1.5 ~2 times the value of the power consumption.

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

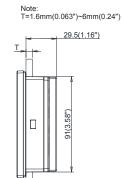




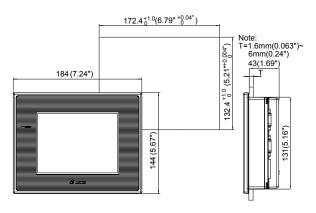
### **DOP-B Series**

• DOP-B03S(E)211

# 118.8°.0(4.68" °0.04" ) 129(5.08") 129(5.08")

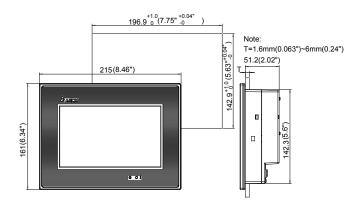


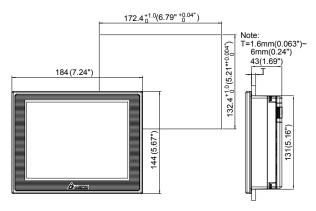
### • DOP-B05S111



### • DOP-B07S(E)415 / DOP-B07PS415

### • DOP-B07S(E)515 / DOP-B07PS515

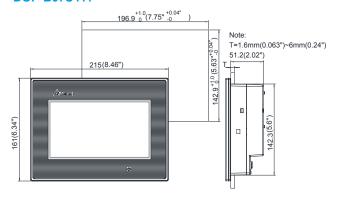




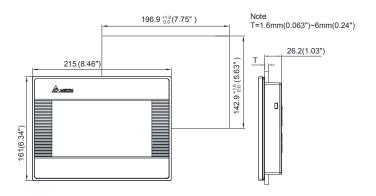


### **DOP-B Series**

#### • DOP-B07S411



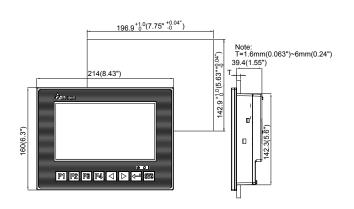
#### • DOP-B07S410



### • DOP-B07S401K

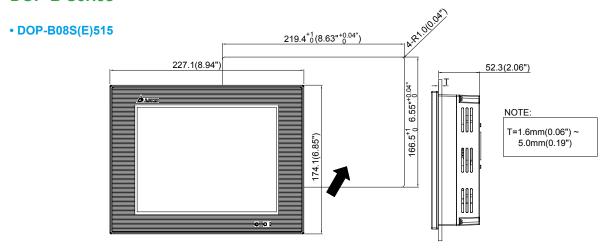
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### • DOP-B07S411K

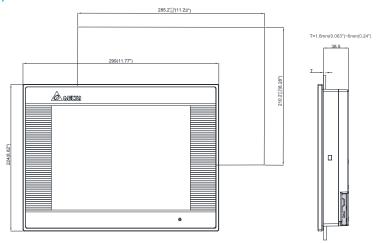




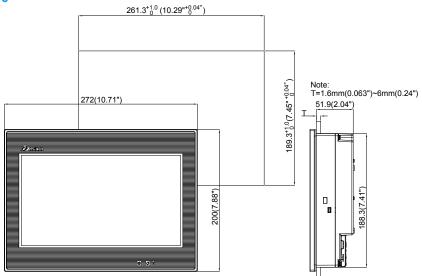
### **DOP-B Series**



### • DOP-B10S(E)51x / DOP-B10PE515

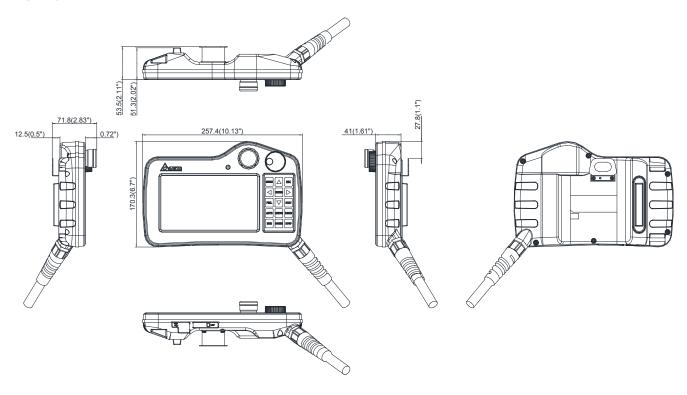


• DOP-B10S(E)615



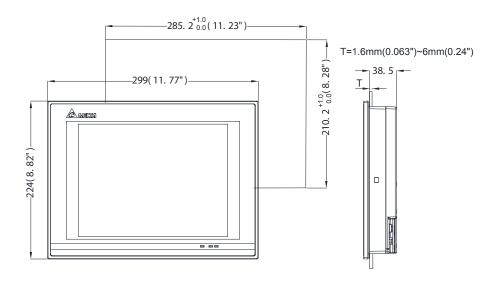
### **DOP-H Series**

### • DOP-H07X4XX



### **DOP-W Series**

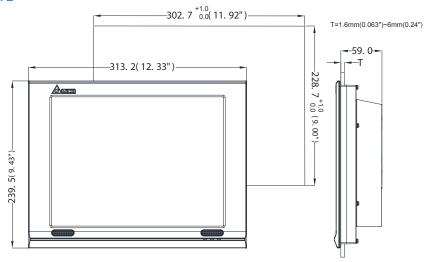
### • DOP-W105B

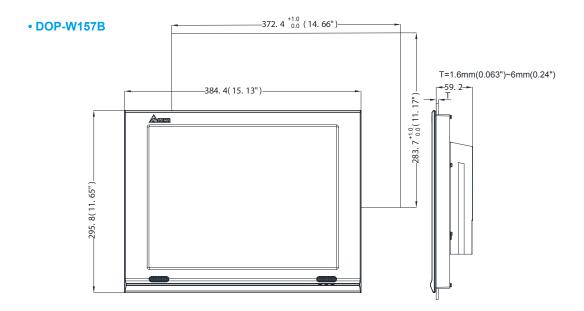




### **DOP-W Series**

### • DOP-W127B

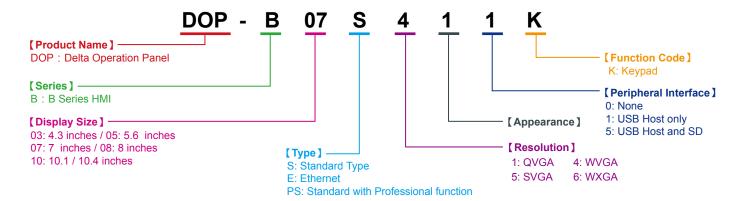


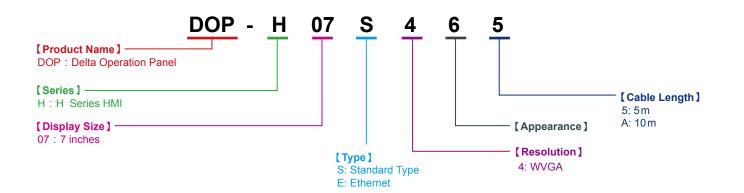


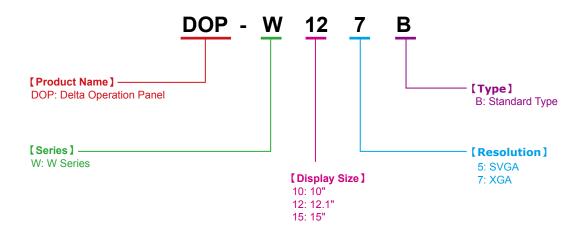
# **Optional Accessories**

Model Name	Description
DOP-CA232DP	DOP-CA232DP: RS-232 Communication Cable for DVP Series PLC (Female Socket)
DVPACAB2A30	DVPACAB2A30: RS-232 Communication Cable for DVP Series PLC (Male Socket)
DOP-CAUSBAB	DOP-CAUSBAB: USB Communication Cable

# **Ordering Information**











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<sup>\*</sup>We reserve the right to change the information in this catalogue without prior notice.