Hardware Specifications

Advanced HMI

Model		Advanced Narrow Frame Type		
		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^2)	400	450	450
	Back Light Life (Hour) *1	10,000	20,000	30,000
	Display Area	95.04 x 53.856 mm	154.08 x 85.92 mm	225.52 x 128.10 mm
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 *2, 10/100 Mbps auto-sensing		
USB		1 USB Slave Ver 2.0 / 1 USB Host Ver 2.0		
SD		N/A		
Serial COM Port	COM1	RS-232 (supports hardware flow control) / RS-485 *2	RS-232 (supports hardware flow control)	
	COM2	RS-422 / RS-485 *2	RS-232 (supports hardware flow control) / RS-485 *2	
	COM3	N/A	RS-422 / RS-485 *2	
RTC		Built-in		
Cooling		Natural air circulation		
Certification		CE / UL		
Waterproof		IP65 / NEMA4 / UL Type 4X (indoor use only)		
Operation Voltage *3		DC +24V (-15% ~ 15%) *2		
Voltage Endurance		A599V for 1 minute (between charging DC24 terminal and FG terminals)		
Power Consumption *5		Max. 5.8 W *3	Max. 8.4 W *3	Max. 11 W *3
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		
Operating 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
Mounting dimension (W) x (H) mm		118.8 x 92.8	186.8 x 126.8	255 x 170.5
Weight		280 g	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 an 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.
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Advanced HMI

Model		Advanced Narrow Frame Type		Advanced Multimedia Type	
		DOP-112WX	DOP-115WX	DOP-112MX	DOP-115MX
LCD Module	Display	12" TFT LCD	15" TFT LCD	12" TFT LCD	15" TFT LCD
	Color	24bit			
	Resolution (Pixels)	1024 x 768			
	Back Light	LED Back Light			
	Back Light Brightness (cd/m^2)	500	450	500	450
	Back Light Life (Hour) *1	50,000			
	Display Area	245.76 x 184.32 mm	304.1 x 228.1 mm	245.76 x 184.32 mm	304.1 x 228.1 mm
MCU		Dual Core 1GHz			
Flash ROM (Bytes)		8GB			
RAM (Bytes)		DDR3 1000MHz 1GB			
Touch Panel		Four-wire resistor, over 10,000,000 pressing times			
Buzzer		Multi-Tone Frequency (2K ~ 4K Hz) / 85dB			
Ethernet Interface		2 Port, 100M bps x 2			
USB		1 Mini USB Slave Ver 2.0 / 1 USB Host Ver 2.0			
SD		SD x 1			
Serial COM Port	COM1	RS-232 (supporting flow control) / RS485 *2			
	COM2	RS-422 / RS485 *2			
	COM3	RS-232 (supporting flow control) / RS-485 *2			
	COM4	RS-422 / RS485			
RTC		Built-in			
Cooling		Natural air circulation			
Certification		CE / UL			
Waterproof		IP65 / NEMA4 / UL Type 4X (indoor use only)			
Operation Voltage *3		DC +24V (-15% ~ 15%) *2			
Voltage Endurance		A599V for 1 minute (between charging DC24 terminal and FG terminals)			
Power Consumption *5		Max. 16.08W	Max. 21.12W	Max. 16.08W	Max. 21.12W
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			
Viberation		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		317.4 x 246.4 x 52.7	387.7 x 295.7 x 63.5	317.4 x 246.4 x 52.7	387.7 x 295.7 x 63.5
Mounting dimension (W) x (H) mm		302.7 x 228.7	372.4 x 283.7	302.7 x 228.7	372.4 x 283.7
Weight		2110g	3200g	2110g	3200g

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4) Built-in power isolation
5) 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.
7) The value of the power consumption indicates the electrical power consumed by the HMI with no peripheral devices connected.
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Hardware Specifications

Standard HMI

Model		Standard General Type			
		DOP-105CQ	DOP-107CV	DOP-110CS	DOP-110CG
LCD Module	Display	5.6" TFT LCD	7" TFT LCD	10" TFT LCD	10.4" TFT LCD
	Color	65,536			
	Resolution (Pixels)	320 x 234	800 x 480	1024 x 600	800 x 600
	Back Light	LED Back Light			
	Back Light Brightness (cd/m^2)	200	400	300	300
	Back Light Life (Hour) *1	20000			
	Display Area	113.28 x 84.70 mm	154.08 X 85.92 mm	226 X 128.7 mm	211.2 x 158.4 mm
MCU		ARM Cortex-A8 (800MHz)			
Flash ROM (Bytes)		256 Mbytes			
RAM (Bytes)		256 Mbytes			
Touch Panel		Four-wire resistor, over > 10,000,000 pressing times			Four-wire resistor, over > 1,000,000 pressing times
Audio Output	Buzzer	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB			
	AUX	N/A			
USB		1 USB Slave Ver 2.0 / 1 USB Host Ver 2.0			
SD		N/A			
Serial COM Port	COM1	RS-232 (supports hardware flow control)*2			
	COM2	RS-232 (supports hardware flow control) / RS-485 *2			
	COM3	RS-422 / RS-485*2			
RTC		Built-in			
Cooling		Nature 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 *3		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		A500V for 1 minute (between charging DC24 terminal and FG terminals)			
Power Consumption *5		Max. 6.86 W *3	Max. 8.5 W *3	Max. 10.4 W *3	Max. 8W*3
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		184 x 144 x 50	215 x 161 x 61.2	272 x 200 x 61	229 x 224 x 46.8
Mounting dimension (W) x (H) mm		172.4 x 132.4	196.9 x 142.9	261.3 x 189.3	285.2 x 210.2
Weight		670 g	970 g	1330g	1735 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 an HMI.6
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 HMI

Model		Standard Ethernet Type (2 COM)	
		DOP-107EG	DOP-107EV
LCD Module	Display	7" TFT LCD	7" TFT LCD
	Color	65,536	
	Resolution (Pixels)	800 x 600	800 x 480
	Back Light	LED Back Light	
	Back Light Brightness (cd/m^2)	450	400
	Back Light Life (Hour) *1	20000	20000
	Display Area	141 X 105.75 mm	154.08 X 85.92 mm
MCU		ARM Cortex-A8 (800MHz)	
Flash ROM (Bytes)		256 Mbytes	
RAM (Bytes)		256 Mbytes	
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 *2, 10/100 Mbps auto-sensing	
USB		1 USB Slave Ver 2.0; 1 USB Host Ver 2.0	
SD		SD x 1	N/A
Serial COM Port	COM1	RS-232 (supports hardware flow control)*2	
	COM2	RS-232 (supports hardware flow control) / RS-485 *2	
	COM3	RS-422 / RS-485*2	
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 *3		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		A500V for 1 minute (between charging DC24 terminal and FG terminals)	
Power Consumption *5		Max. 8.4 W *3	Max. 8.76 W *3
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	
Operating 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		184 x 144 x 51.5	215 x 161 x 61.2
Mounting dimension (W) x (H) mm		172.4 x 132.4	196.9 x 142.9
Weight		800 g	970g

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Hardware Specifications

Standard HMI

Model		Standard Ethernet Type (3 COM)			
		DOP-107IV	DOP-108IG	DOP-110IS	DOP-110IS
LCD Module	Display	7" TFT LCD	8" TFT LCD	10.1" TFT LCD	10.4" TFT LCD
	Color	65,536			
	Resolution (Pixels)	800 x 480	800 x 600	1024 x 600	800 x 600
	Back Light	LED Back Light			
	Back Light Brightness (cd/m^2)	400	250	300	300
	Back Light Life (Hour) *1	20000			
	Display Area	152.4 x 91.44 mm	162 x 121.5 mm	226 x 128.7 mm	211.2 x 158.4 mm
MCU		ARM Cortex-A8 (800MHz)			
Flash ROM (Bytes)		256 Mbytes			
RAM (Bytes)		256 Mbytes			
Touch Panel		Four-wire resistor, over > 10,000,000 pressing times			
Audio Output	Buzzer	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB			
	AUX	N/A	Stereo output		
Ethernet Interface		1 Port*2, 10/100 Mbps auto-sensing			
USB		1 USB Slave Ver 2.0 / 1 USB Host Ver 2.0			
SD		SD x 1			
Serial COM Port	COM1	RS-232 (supports hardware flow control)*2			
	COM2	RS-232 (supports hardware flow control) / RS-485 *2			
	COM3	RS-232 (supports hardware flow control) / RS-422 / RS-485*2			
RTC		Built-in			
Cooling		Nature 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 *3		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		A500V for 1 minute (between charging DC24 terminal and FG terminals)			
Power Consumption *5		Max. 12W *3	Max. 9.88W *3	Max. 9.6W *3	Max. 9.6W*3
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		215 x 161 x 61.2	227.1 x 174.1 x 61	272.6 x 200.6 x 54	299 x 224 x 46.8
Mounting dimension (W) x (H) mm		196.9 x 142.9	219.4 x 166.5	261.3 x 189.3	285.2 x 210.2
Weight		970g	1226g	1130g	1600g

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Basic HMI

Model		Basic Type		Basic Ethernet Type
		DOP-103BQ	DOP-107BV	DOP-107DV
LCD Module	Display	4.3" TFT LCD	7" TFT LCD	7" TFT LCD
	Color	65,536		
	Resolution (Pixels)	480 x 272	800 x 480	800 x 400
	Back Light	LED Back Light		
	Back Light Brightness (cd/m^2)	400		
	Back Light Life (Hour) *1	20000		
	Display Area	95.04 x 53.856 mm	154.08 x 85.92 mm	154.08 x 85.92 mm
MCU		ARM Cortex-A8 (800MHz)		
Flash ROM (Bytes)		256 Mbytes		
RAM (Bytes)		256 Mbytes		
Touch Panel		Four-wire resistor, over > 10,000,000 pressing times		
Audio Output	Buzzer	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB		
	AUX	N/A		
Ethernet Interface		N/A	N/A	1 Port, 10/100 Mbps auto-sensing*2
USB		1 USB Slave Ver 2.0 / 1 USB Host Ver 2.0		
SD		N/A		
Serial COM Port	COM1	RS-232/RS-485 (supports hardware flow control)*2		
	COM2	RS-422 / RS-485*2		
	COM3	N/A		
RTC		Built-in		
Cooling		Nature 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 *3		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		A500V for 1 minute (between charging DC24 terminal and FG terminals)		
Power Consumption *5		Max. 5.67W *3	Max. 8.6W *3	Max. 8.8W *3
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	215 x 161 x 35.5	215 x 161 x 35.5
Mounting dimension (W) x (H) mm		118.8 x 92.8	196 x 142.9	196 x 142.9
Weight		280 g	700 g	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 an HMI.6
2) Built-in power isolation
3) An isolated power supply is recommended.
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5) The value of the power consumption indicates the electrical power consumed by the HMI with no peripheral devices connected.
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Model Description

DOP - 1 07 W V

Product Name
DOP : Delta Operation Panel

Series
1 : 100 Series HMI

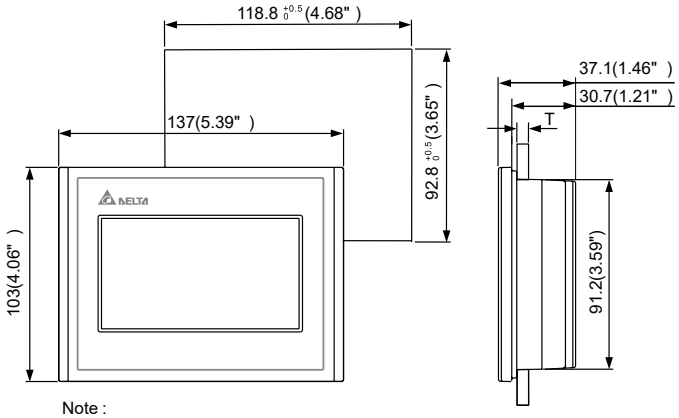
Display Size				
00 : Zero	03 : 4.3"	05 : 5.6"	7 : 7"	8 : 8"
10 : 10.1" / 10.4"	12 : 12"	15 : 15"		

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
D : Basic Ethernet Type
C : Standard General Type
E : Standard Ethernet Type (2 COM)
I : Standard Ethernet Type (3 COM)
W : Advanced Narrow Frame Type
M : Advanced Multimedia Type

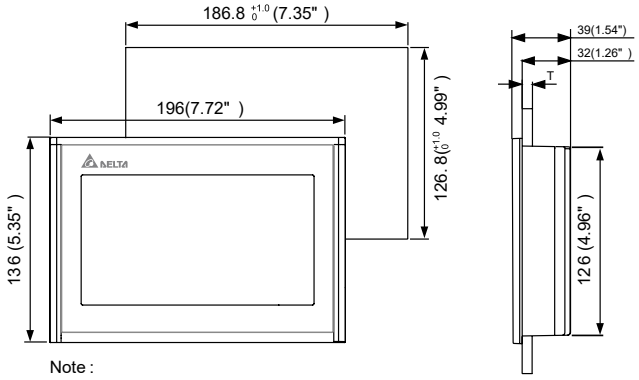
Dimensions Unit: mm (inches)

• DOP-103WQ



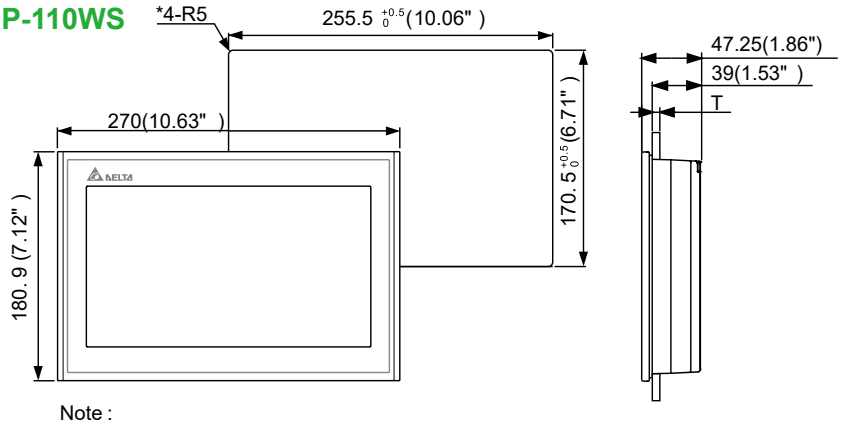
Note :
T=1.6mm~3mm(0.063"~0.12")

• DOP-107WV



Note :
T=1.6mm~6mm(0.063"~0.24")

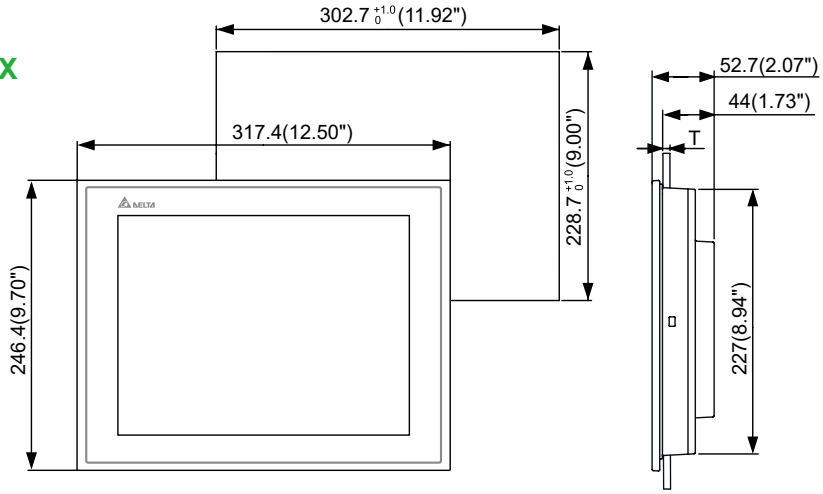
• DOP-110WS



Note :
T=1.6mm~6mm(0.063"~0.24")

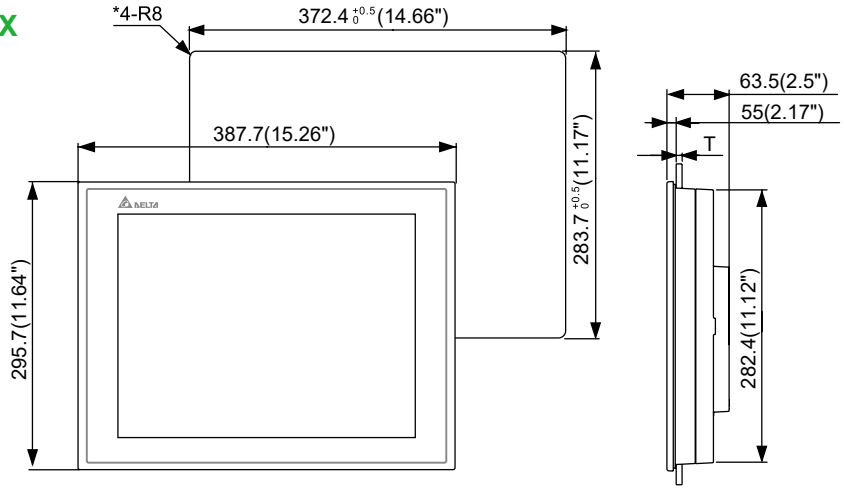
Dimensions Unit: mm (inches)

• DOP-112MX / DOP-112WX



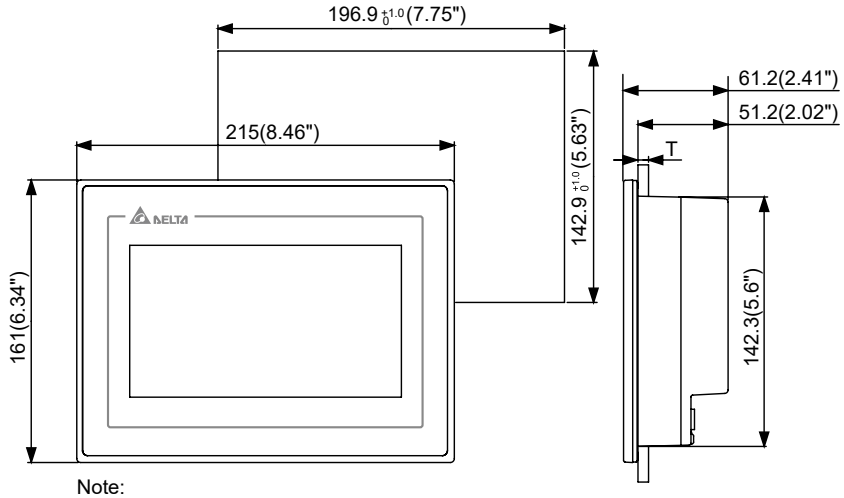
Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

• DOP-115MX / DOP-115WX



Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

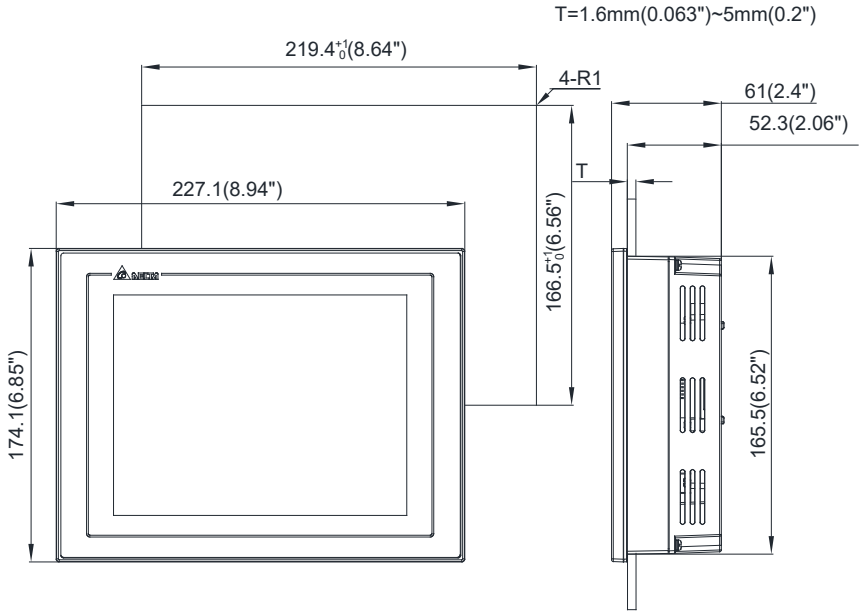
• DOP-107IV



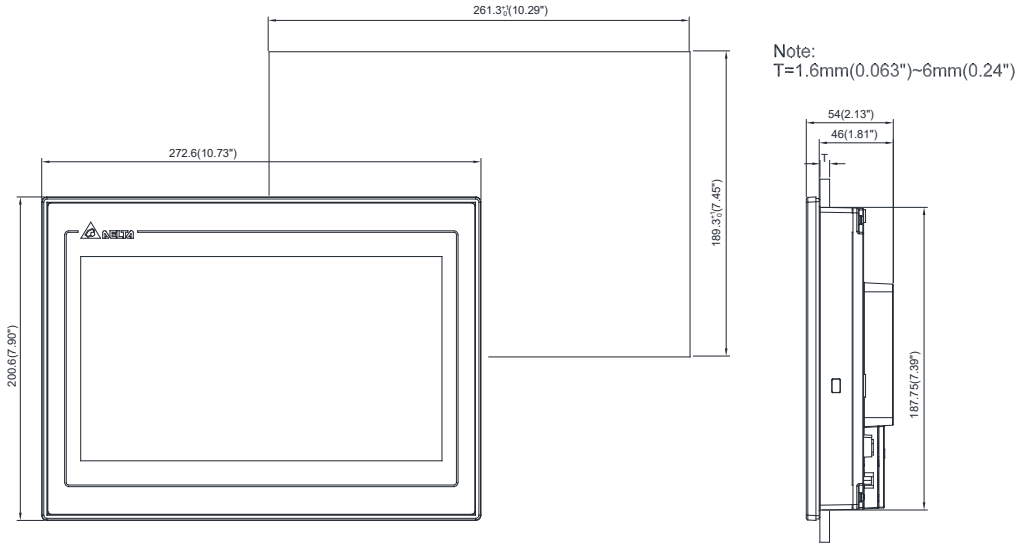
Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

Dimensions Unit: mm (inches)

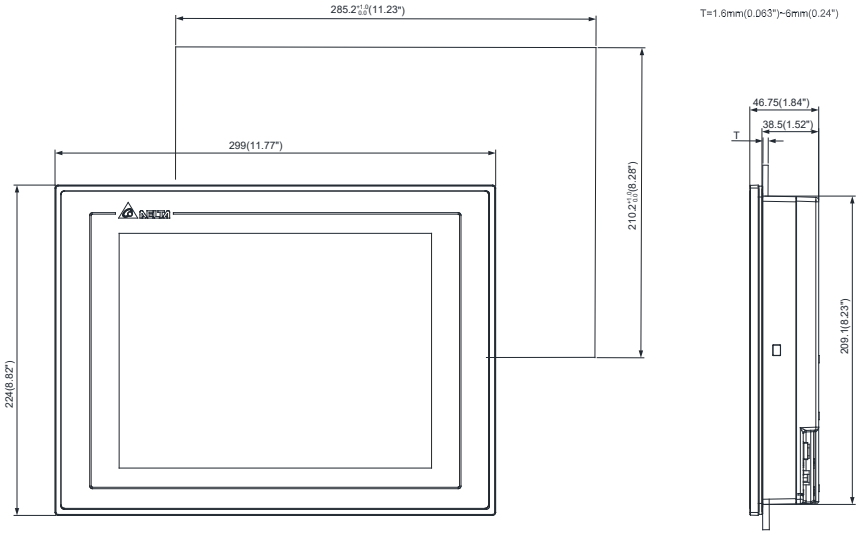
• DOP-108IG



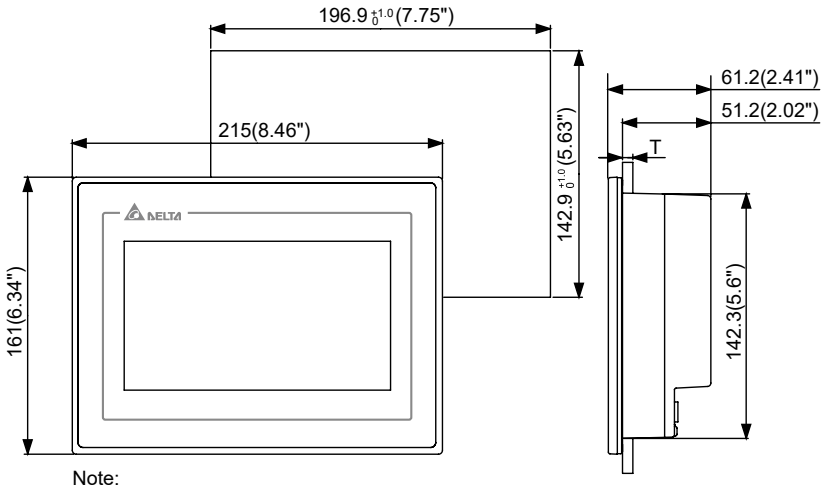
• DOP-110IS



• DOP-110IG

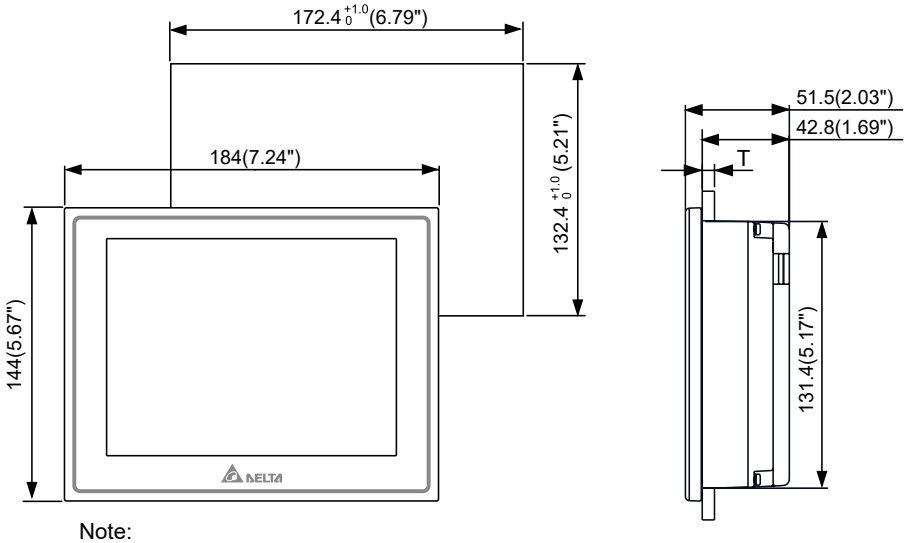


• DOP-107EV



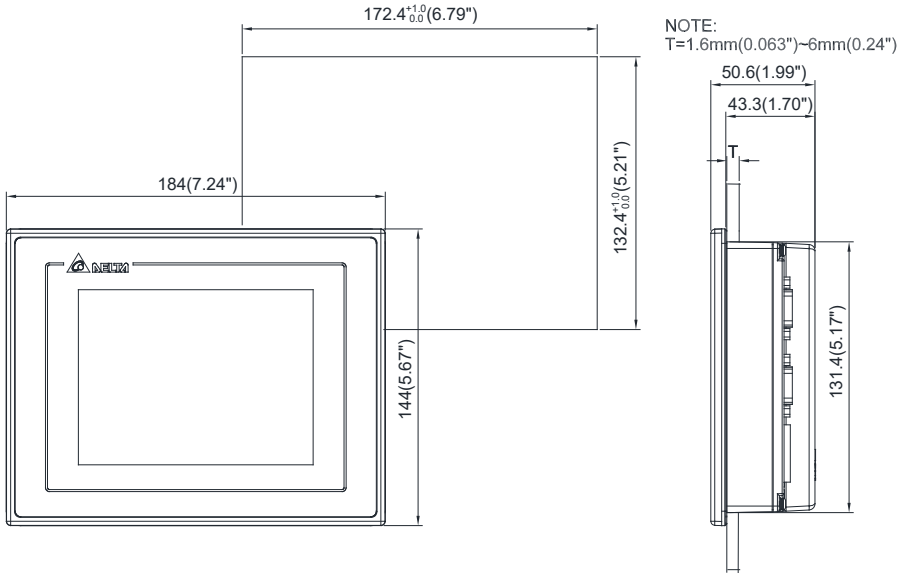
Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

• DOP-107EG



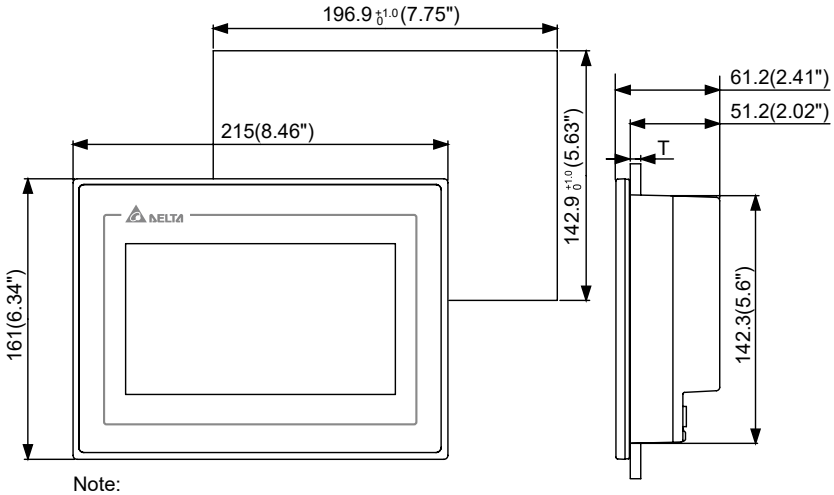
Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

• DOP-105CQ



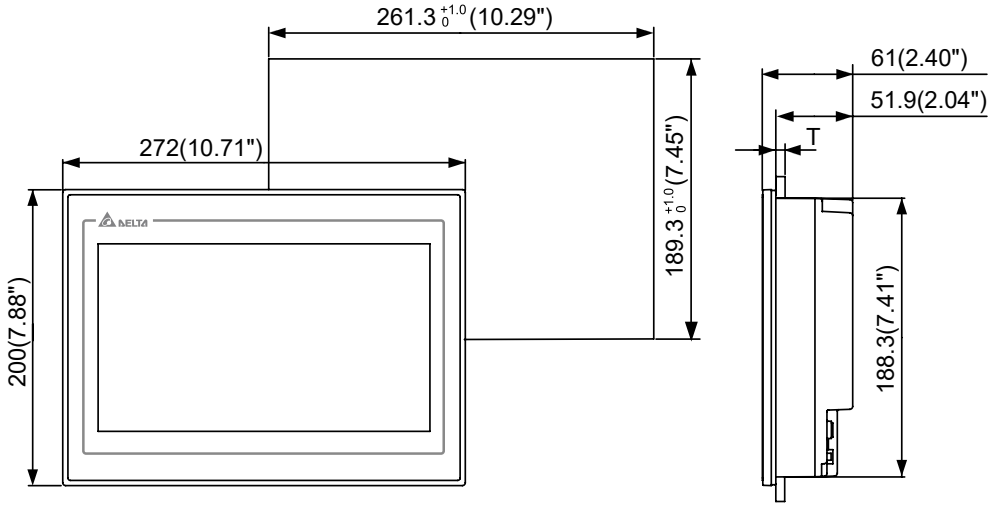
Dimensions Unit: mm (inches)

• DOP-107CV



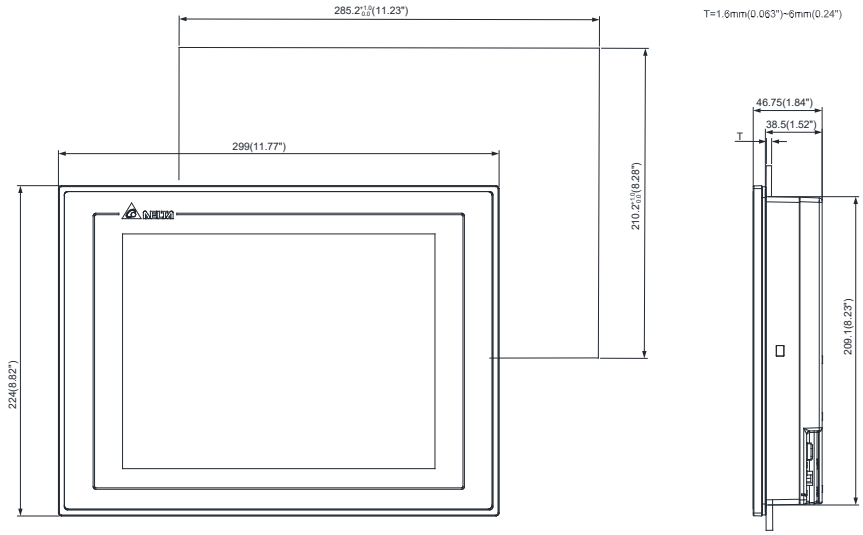
Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

• DOP-110CS

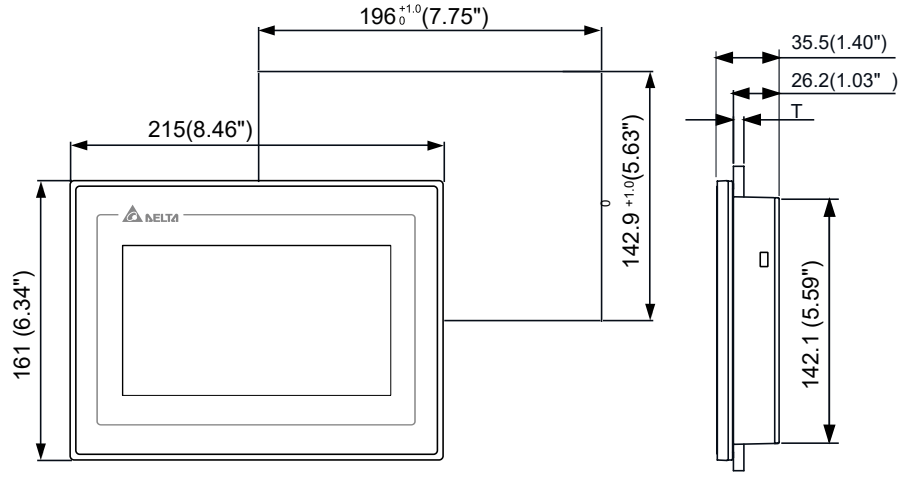


Note:
T=1.6 mm ~ 6 mm(0.063" ~ 0.24")

• DOP-110CG

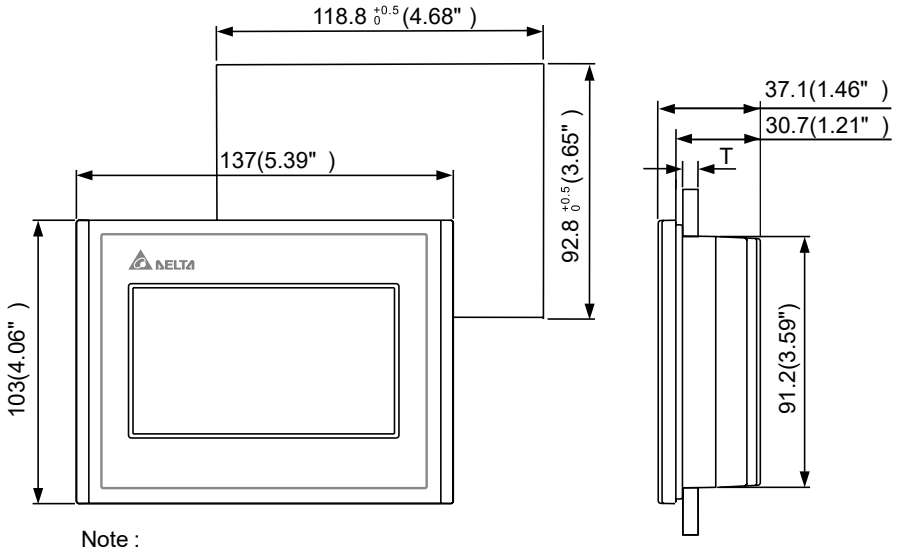


• DOP-107DV



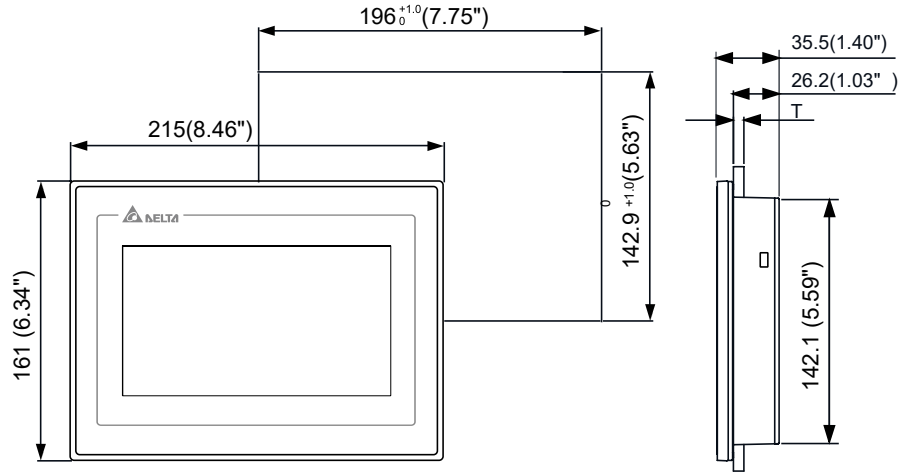
Note:
T=1.6 mm~6 mm(0.06"~0.24")

• DOP-103BQ



Note :
T=1.6mm~3mm(0.063"~0.12")

• DOP-107BV



Note:
T=1.6 mm~6 mm(0.06"~0.24")