



2023-09-06



5014148701-7W01

DOP-107WVCS

High Color • Widescreen •

User-Friendly HMI Products

Delta Electronics Inc.,

No.18, Xinglong Rd., Taoyuan City 33068, Taiwan

Instruction Sheet**(1) Preface**

Thank you for purchasing DOP-107WV. This instruction sheet provides information about DOP-107WV. Before using the product, please read through this manual carefully in order to ensure the correct use of the product. In addition, please place this manual safely for quick reference whenever is needed. Please follow the rules below if you have not finished reading this manual yet.

- Before operate the touch panel, please remove the film of HMI.
- Install the product in a clean and dry location free from corrosive and inflammable gases or liquids, indoor use only.
- Ensure that all wiring instructions and recommendations are followed.
- Ensure that HMI is correctly connected to the ground. The grounding method must comply with the national electrical standard (Please refer to NFPA 70: National Electrical Code, 2005 Ed.
- Do not modify the wiring or disassemble HMI interface when HMI is connected to the power.
- Do not touch the power supply during operation. Otherwise, it may cause electric shock.
- When HMI displays low power notification and requires battery changes, please contact local distributors or DELTA customer service center for the replacement. Do not change batteries by yourself.
- DOP-100 series can be used for industrial automation equipment. Please read through this manual carefully and install the product according to the instructions in order to avoid danger.
- Cleaning method: Please use dry cloth to clean the product.
- The product should be used at an altitude below 5000 m.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- For repairing and maintenance, please contact DELTA Electronics, Inc. Address: No.18, Xinglong Rd., Taoyuan City, Taiwan. TEL: +886-3-3626301.

If you have any enquiry during operation, please contact our local distributors or Delta sales representatives. The content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the latest version at <https://www.deltaww.com/zh-tw/index>.

(1) Précautions générales (FR)

Merci d'avoir acheté ce produit. Cette fiche d'instructions fournit des informations pour les IHM de la série DOP-107WVCS. Avant d'utiliser ce produit, lisez attentivement cette fiche d'instructions pour assurer une utilisation correcte du produit. Gardez cette fiche à portée de main pour pouvoir vous y référer rapidement en cas de besoin. Avant de terminer la lecture de cette fiche, suivez ces instructions :

- Installez le produit dans un environnement exempt de vapeur, de gaz corrosifs et de gaz inflammables.
- Reportez-vous au schéma de câblage pour le raccordement des fils.
- Assurez-vous que ce produit est correctement mis à la terre. La méthode de mise à la terre doit être conforme aux directives des normes électriques nationales (voir NFPA 70 : National Electrical Code (Code électrique national), 2005 Ed.).
- Ne démontez pas l'IHM et ne changez pas le câblage, lorsque l'appareil est sous tension.
- Ne touchez pas à l'alimentation électrique lorsque l'appareil est sous tension, cela pourrait provoquer un choc électrique.
- Lorsque l'IHM affiche une information d'alimentation faible et nécessite un changement de batterie, contactez votre distributeur local ou le centre de service clientèle Delta pour le remplacement. Ne changez pas vous-même les batteries.
- Ce produit peut être utilisé avec d'autres équipements d'automatisation industrielle. Lisez attentivement cette fiche et installez le produit conformément aux instructions pour éviter tout danger.
- Méthode de nettoyage : nettoyez le produit à l'aide d'un chiffon sec.
- Utiliser ce produit à une altitude inférieure à 5 000 m (6,561.68 ft).
- Si l'équipement est utilisé d'une manière non spécifiée par le fabricant, la protection fournie par l'équipement risque d'être compromise.
- Pour les réparations et l'entretien, contactez Delta Electronics, Inc. Adresse : No. 18, Xinglong Rd., Taoyuan City, Taiwan. TÉL : +886-3-3626301.

Si vous avez des questions concernant le fonctionnement du programme, contactez nos distributeurs locaux ou le centre de service clientèle Delta. La fiche d'instructions peut être révisée sans préavis. Contactez nos distributeurs ou téléchargez la dernière version sur le site web de Delta à l'adresse <https://www.deltaww.com/>.

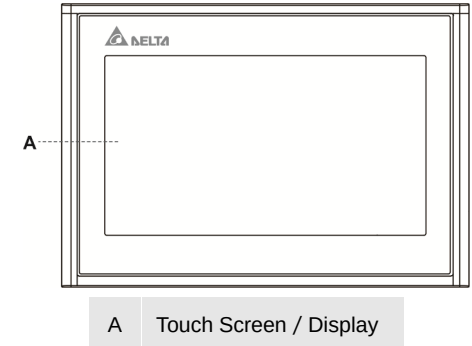
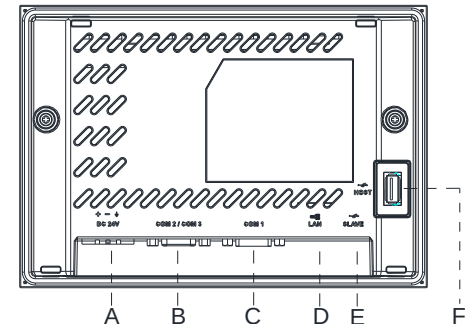
(2) Communication Port Pin Assignment**DOP-107WVCS COM1**

COM Port	Pin	MODE1
		RS-232
	1	
	2	RXD
	3	TXD
	4	
	5	GND
	6	
	7	RTS
	8	CTS
	9	

DOP-107WVCS COM2

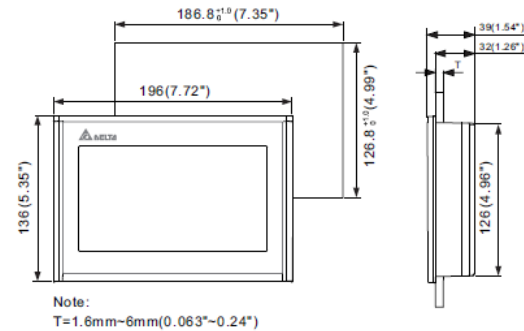
COM Port	Pin	MODE1		MODE2		MODE3	
		COM2	COM3	COM2	COM3	COM2	COM3
		RS-232	RS-485	RS-485	RS-485	RS-232	RS-422
	1			D+			TXD+
	2	RXD				RXD	
	3	TXD				TXD	
	4		D+		D+		RXD+
	5	GND		GND		GND	
	6			D-			TXD-
	7	RTS				RTS	
	8	CTS				CTS	
	9		D-		D-		RXD-

Note 1: Blank means connection is not required.

(3) Part names**DOP-107WVCS (Front View)****DOP-107WVCS (Rear View)**

A	Power Input (24AWG wire min.)	B	COM2/ COM3
C	COM1	D	Network Port (LAN)
E	USB Slave	F	USB Host

(4) Dimensions for Installation
DOP-107WVCS



Operation Temperature is -30°C ~ +70°C
Storage Temperature is -40°C ~ +80°C

(5) Installation and Wiring

Installation Notes:

- Improper installation will result in malfunction and greatly reduce the life of the HMI. Be sure to follow the guidelines in this quick start when installing the HMI.
- In order to ensure the HMI being well ventilated, make sure that the ventilation holes are not obstructed and provide sufficient clearance for the HMI.
- To protect the panel, be sure to install a waterproof gasket into HMI.
- For use on a flat surface of a Type 4X enclosure or equivalent. If Enclosure with lower type rating will cause de-rating.
- The allowable thickness of the panel for mounting should be less than 5 mm (0.2 inches) .

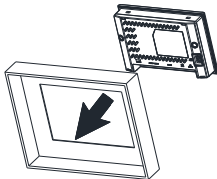
(5) Installation et câblage (FR)

Précautions :

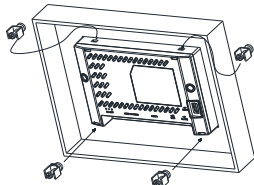
- Un sens d'installation incorrect peut entraîner un dysfonctionnement.
- Pour une bonne ventilation et un refroidissement optimal, laissez un espace suffisant entre l'IHM et les objets ou les parois adjacentes, une surchauffe peut entraîner un dysfonctionnement de l'appareil.
- Ce produit doit être utilisé sur des boîtiers de type 4X fabriqués pour une utilisation en intérieur.
- L'épaisseur maximale du panneau pour le montage ne doit pas dépasser 5 mm (0,2 pouce).
- Utilisez des fils de cuivre.

Installation Method:

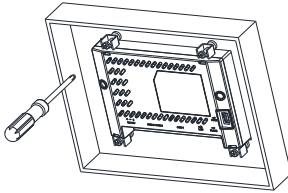
Step 1:
Put the waterproof gasket into HMI and then insert the HMI into the panel cutout.



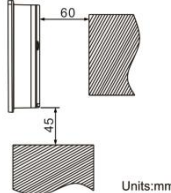
Step 2:
Place the fasteners into slots and tighten the screws till reaching the panel cutouts.



Step 3:
Tighten the screws with torque less than 0.5N-M / 0.7N-M to avoid damage to the plastic case.
DOP-107 Torque: 6.17 lb-inch (0.7N-M)



Step 4:
For heat dissipation, keep a minimum clearance of 60 mm (2.36 inches) and 45 mm (1.77 inches) respectively on the rear and bottom of the HMI.

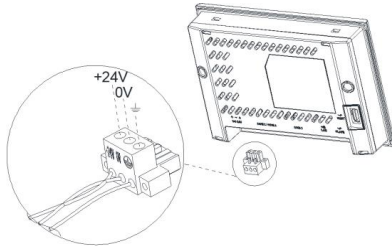


Recommended wiring is as follows:

Type	Material	Wire Gauge (AWG)	Stripped length	Torque
Solid	Copper	24 ~ 12	7 ~ 8 mm	5 kg-cm (4.3 lb-in)
Stranded	Copper	24 ~ 12	7 ~ 8 mm	5 kg-cm (4.3 lb-in)



Be sure to perform wiring by referring to the following figure (power supply connector), wiring must be rated 75°C min



(6) Specifications

Model		DOP-107WVCS
LCD Module	Display Type	7" TFT LCD (65535 colors)
	Resolution	800 x 480 pixels
	Backlight	LED Back Light (less than 20,000 hours half-life at 25°C) (Note 1)
	Display Size	154.08 x 85.92 mm
	Brightness	1000 cd/m ² (Typ.)
CPU		ARM Cortex-A8 (1GHz)
Flash ROM		1000 Mbytes
RAM		1000 Mbytes
Touch Screen		4-wire resistive touch screen > 10,000,000 operated
Buzzer		Multi-Tone Frequency (2 K ~ 4 K Hz) / 80 dB
Ethernet Interface		10/100 Mbps Auto sensing (with built-in isolated power circuit (Note 2))
USB		1 USB Slave Ver 2.0
		1 USB Host Ver 2.0

SD		N/A
Serial Communication Port	COM1	RS-232 (supports flow control) (Note 2)
	COM2	RS-232 (supports flow control) / RS-485 (Note 2)
	COM3	RS-422 / RS-485 (Note 2)
Perpetual Calendar		Built-in
Cooling Method		Natural cooling
Safety Approval		CE / UL (Please use shielding Ethernet cable and the magnetic ring with filter of 300 ohm/100 MHz)
Waterproof Level of Panel Display		IP 66/NEMA 4/Type 12/Type 4X (indoor and outdoor use)
Operation Voltage (Note2)		+24 V _{DC} (-15% ~ +20%) (with built-in isolated power supply unit) Supplied by Class 2 or SELV circuit (isolated from MAINS by double insulation)
Voltage Endurance		500 V _{AC} for 1 minute (between charging (DC24V terminal) and FG terminals)
Power Consumption (Note 2)		8.4W (Max) (Note 3)
Backup Battery		3V lithium battery CR2032 × 1
Backup Battery Life		About 3 years or more at 25°C but subjects to the temperature and the conditions during usage.
Operation Temperature		-30°C ~ +70°C
Storage Temperature		-40°C ~ +80°C
Operating Environment		10% ~ 90% RH [0 ~ 40°C], 10% ~ 55% RH [41 ~ 50°C], 10% ~ 20% RH [51 ~ 70°C]; Pollution degree: 1
Storage Environment		10%~95%RH【0~40℃】，10%~55%RH【41~50℃】，10%~20%RH【51~80℃】
Vibration Resistance		Conforms to IEC61131-2; Continuous: 5 Hz ~ 8.3 Hz 3.5 mm, 8.3 Hz ~ 150 Hz 1 G
Shock Resistance		Conforms to IEC60068-2-27: 11 ms, 15 G Peak , X, Y, Z direction for 6 times
Dimension (W) x (H) x (D) mm		196 x 136 x 39
Dimension for Installation (W) x (H) mm		186.8 x 126.8
Weight		Approx. 560 g

Note:

- 1) The half-life of backlight is defined as original luminance being reduced by 50% when the maximum driving current is supplied to HMI. The life of LED backlight shown here is an estimated value under 25°C normal temperature and humidity conditions.
- 2) The withstand voltage of the isolated power circuit is 1500 V peak for 1 minute.
- 3) Power consumption of HMI is the power consumed when not connecting to any peripheral devices. To ensure normal operation of HMI, the recommended power supply is: power consumption x 1.5 ~ 2.
- 4) Isolated power supply is recommended.
- 5) DOPSoft, the program editor for DOP-100 series products and user manuals can be downloaded at our website. In addition, the content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the latest version at <https://www.deltaww.com/zh-tw/index>.
- 6) DOP-100 series can be used for industrial automation equipment. Please read through this manual carefully and install the product according to the instructions to avoid danger.



DOP-107WVCS

Yüksek Renk · Geniş Ekran · Kullanıcı Dostu HMI
Ürünleri

No.18, Xinglong Rd., Taoyuan City 33068, Taiwan

Bilgi Dokümanı

(1) Önsöz

DOP-100 ürünlerini satın aldığınız için teşekkürler. Bu bilgi dokümanı DOP-100 serileri için bilgiler sağlar. Ürünü kullanmadan önce, doğru kullanım için lütfen dokümanı tamamen okuyunuz. Ayrıca daha sonra ihtiyaç duyulduğunda kullanabilmek için bu dokümanı iyi muhafaza ediniz. Eğer okumayı tamamladıysanız lütfen aşağıda yazılı olan kuralları uygulayınız.

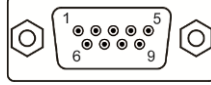
- Çalıştırma panelini kullanmadan önce ekrandaki koruyucu filmi çıkarın.
- Ürünün kurulumunu aşındırıcı veya yanıcı gaz veya sıvılardan uzak, temiz ve kuru yerlere yapınız. Sadece iç mekanda kullanınız
- Tüm bağlantıların dokümanda belirtildiği gibi olduğuna emin olunuz.
- HMI toprak bağlantısının doğru olduğuna emin olunuz. Topraklama metodu uluslararası elektrik standardına uyumlu olmalıdır. (NFPA 70: National Electrical Code).
- HMI ürününü enerjili iken bağlantılara müdahale etmeyiniz.
- Çalışma sırasında güç kaynağına dokunmayınız. Aksi halde elektrik şoku meydana gelebilir.
- HMI düşük pil uyarısı gösterirse ve pil değişimi gerekirse firmamız ile temasa geçiniz, kendiniz değiştirmeyiniz.
- DOP-100 serisi endüstriyel otomasyon ekipmanı olarak kullanılır. Lütfen bu dokümanı dikkatli okuyun ve tehlikeli durumları önlemek için ürünü belirtilen direktiflere uygun kurunuz.
- Temizleme metodu: Ürünü temizlemek için kuru bir bez kullanınız.
- Ürün 5000m altında bir rakımda kullanılmalıdır.
- Ürünle ilgili sorularınız için firmamız ile kontak kurabilirsiniz.

Ürünün kullanımı ile ilgili sorularınız için teknik servisimizle kontak kurabilirsiniz. Bu bilgi dokümanının içeriği herhangi bir bildirim gerek duyulmadan değiştirilebilir. Dokümanın son versiyonunu internetten indirebilirsiniz. <https://www.deltaww.com/zh-tw/index>.

(2) Haberleşme Pinleri

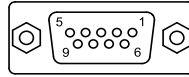
DOP-107WVCS COM 1 Pinleri

COM Port	Pin	MODE1
		RS-232
	1	
	2	RXD
	3	TXD
	4	
	5	GND
	6	
	7	RTS
	8	CTS
	9	



DOP-107WVCS COM2 Pinleri

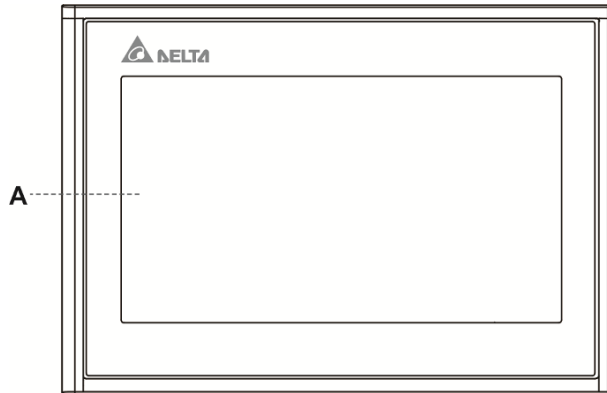
COM Port	Pin	MODE1		MODE2		MODE3	
		COM2	COM3	COM2	COM3	COM2	COM3
		RS-232	RS-485	RS-485	RS-485	RS-232	RS-422
	1			D+			TXD+
	2	RXD				RXD	
	3	TXD				TXD	
	4		D+		D+		RXD+
	5	GND		GND		GND	
	6			D-			TXD-
	7	RTS				RTS	
	8	CTS				CTS	
	9		D-		D-		RXD-



Not 1: Boş olan terminallere bağlantı yapılmaz.

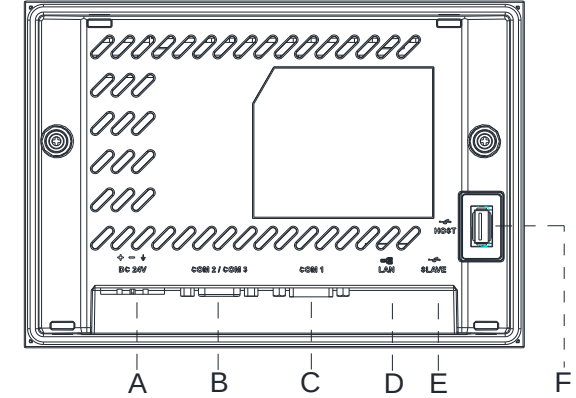
(3) Parça isimleri

DOP-107WVCS (Ön Görünüm)



A Dokunmatik Ekran / Display

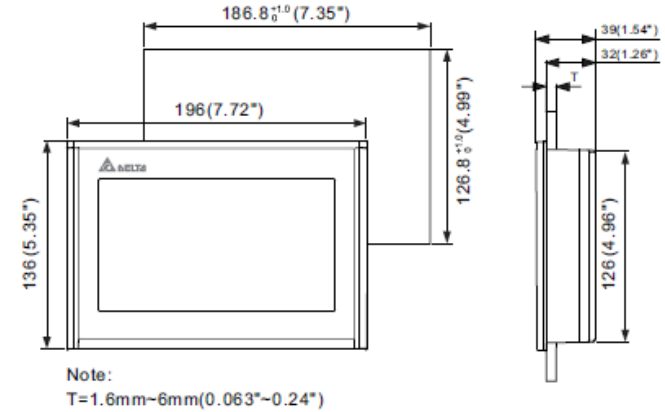
DOP-107WVCS (Arka Görünüm)



A	Power Girişi (24AWG wire min.)	B	COM2 / COM3
C	COM1	D	Network Port (LAN)
E	USB Slave	F	USB Host

(4) Kurulum için Ölçüler

DOP-107WVCS



Çalışma Sıcaklığı olduğu -30°C için 70°C ve Saklama Koşulları olduğu -40°C için +80°C

(5) Kurulum ve Bağlantı

Kurulum Notları:

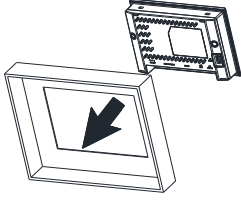
- Yanlış kurulum yapılması ürünün zarar görmesini veya çalışma ömrünün kısalmasına sebep olur. HMI kurulumunun doküman da belirtildiği gibi yapılması gerekir
- HMI'nın havalandırmasının doğru olduğuna emin olmak için, havalandırma deliklerinin tıkalı olmadığına ve HMI etrafında

gerekli boşluğun bırakıldığına emin olunuz

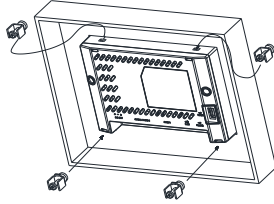
- Panelin iyi korunduğuna emin olmak için, HMI içine su geçirmez conta koyduğunuza emin olunuz.
- Düz yüzey, Tip 4X ve eşdeğer ortamlarda kurulum yapılmalıdır.
- Montaj için kullanılan panelin kalınlığı 5 mm'den az olmalıdır

Kurulum Metodu:

Adım 1:
HMI içine su geçirmez contanın takıldığına emin olunuz ve sonra pano boşluğuna yerleştiriniz.

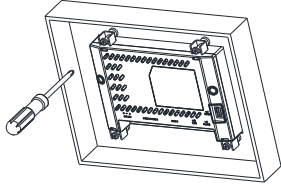


Adım 2:
Montaj aparatlarını HMI'nın yuvalarına yerleştiriniz ve sonra panoya değene kadar vidaları sıkınız.

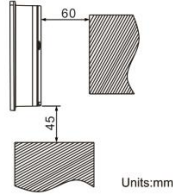


lastik kasaya zarar vermemek için vidayı 0.5N-M / 0.7N-M'den az bir tork ile sıkınız.

DOP-107 Tork:
6.17lb-inch(0.7N-M)



Adım 4:
Isı dağılımı sağlanabilmesi için HMI arka paneli ile duvar, kurulum yüzeyi veya başka kontrol cihazı arasında en az 60 mm boşluk bırakınız.

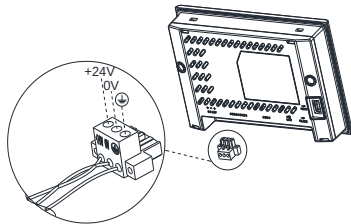


Bağlantı özelliklerini aşağıdaki tabloda görebilirsiniz:

Tip	Malzeme	Kablo Ölçüsü (AWG)	Soyma Uzunluğu	Tork
Tek damarlı	bakır	24~ 12	7 ~ 8 mm	5 kg-cm (4.3 lb-in)
Çok damarlı	bakır	24 ~ 12	7 ~ 8 mm	5 kg-cm (4.3 lb-in)



Bağlantının aşağıdaki şekilde gösterildiği gibi yapıldığına emin olunuz. (Besleme konnektörü)



(6) Özellikler

Model		DOP-107WVCS
LCD Modül	Display Tipi	7" TFT LCD (65535 renk)
	Çözünürlük	800 x 480 piksel
	Aydınlatma	LED Aydınlatma (Yarım ömürde 25°C'de 20,000 saatten az) ^(Not 1)
	Dislay Ölçüsü	154.08 x 85.92 mm
	Parlaklık	1000 cd/m ² (Tipik)
CPU		ARM Cortex-A8 (1GHz)
Flash ROM		1000 Mbytes
Dahili Hafıza		1000 Mbytes
Dokunmatik Ekran		4-telli rezistif dokunmatik ekran > 10,000,000 işleme
Buzzer		Multi-Tone Frekans (2 K ~ 4 K Hz) / 80 dB
Ethernet Arabirimi		10/100 Mbps Otomatik Algılama (dahili izoleli güç devresi) ^(Not 2)
USB		1 USB Slave Ver 2.0 1 USB Host Ver 2.0
SD		N/A
Seri Haberleşme Portu	COM1	RS-232 (Flow kontrol destekler) ^(Not 2)
	COM2	RS-232 (Flow kontrol destekler) / RS-485 ^(Not 2)
	COM3	RS-422 / RS-485 ^(Not 2)
Sürekli Takvim		Dahili
Soğutma Metodu		Doğal Soğutma
Güvenlik Onayı		CE / UL (Lütfen ekranlı Ethernet kablosu ve 300 ohm/100 MHz filtre ile manyetik halka kullanınız)
Panel Display Su Geçirmezlik Seviyesi		IP 66/NEMA 4/Type 12/Type 4X (indoor and outdoor use)
Çalışma Voltajı ^(Not2)		+24 VDC (-15% ~ +20%) (Dahili izoleli güç kaynağı ile) (SELV devresi tarafından beslenir (Şebeke hattından çift yalıtım ile izole edilmiştir))
Voltaj Dayanıklılığı		1 dakika için 500 V _{AC} (DC24V terminal ve FG terminalleri arası)
Güç Tüketimi ^(Not 2)		8.4W (Max) ^(Note 3)
Backup Pili		3V lityum pil CR2032 × 1
Backup Pil Ömrü		Normal koşullarda 25°C'de 3 yıl veya daha fazla.
Çalışma Sıcaklığı		-30°C ~ +70°C
Saklama Koşulları		-40°C ~ +80°C
Çalışma Ortamı		10% ~ 90% RH [0 ~ 40°C], 10% ~ 55% RH [41 ~ 50°C], 10% ~ 20% RH [51 ~ 70°C]; Kirlenme derecesi: 1
Saklama Ortamı		10%~95%RH【0~40°C】, 10%~55%RH【41~50°C】, 10%~20%RH【51~80°C】
Titreşim Direnci		IEC61131-2 ile uyumlu; Sürekli: 5 Hz ~ 8.3 Hz 3.5 mm, 8.3 Hz ~ 150 Hz 1 G

Şok Direnci	IEC60068-2-27 ile uyumlu: 11 ms, 15 G Pik, X, Y, Z yönünde 6 kere
Ölçüler (W) x (H) x (D) mm	196 x 136 x 39
Kurulum Yeri Ölçüleri (W) x (H) mm	186.8 x 126.8
Ağırlık	Yaklaşık 560 g

Note:

1. Arka ışık yarı-ömrü, maksimum besleme akımı HMI'ya uygulandığında orijinal parlaklığın %50 oranında azaltılmış olması olarak tanımlanır. Burada gösterilen LED aydınlatma ömrü 25°C normal sıcaklık ve nem koşullarında tahmini bir değerdir.
2. İzoleli güç devresi dayanma voltajı 1 dakika için 1500 V pik.
3. HMI güç tüketimi herhangi bir cihaza bağlı değil iken tükettiği güçtür. Normal çalışma için tavsiye edilen güç kaynağı tüketilen gücün 1.5 ~ 2 katıdır.
4. İzoleli güç kaynağı kullanılması tavsiye edilir
5. DOP-100 serisi ürünlerin program editörü olan DIAScreen programı ve kullanıcı manueli web sayfamızdan indirilebilirsiniz.
<https://www.deltaww.com/zh-tw/index>.
6. DOP-100 serisi endüstriyel otomasyon donanımı olarak kullanılabilir. Tehlikeleri önlemek için bu bilgi dokümanını dikkatlice okuyun ve belirtilen direktiflere göre kurulumu gerçekleştirin.

Delta Greentech Elektronik San. Ltd. Şti.

Şerifali Mahallesi, Hendem Caddesi, Kule Sokak, No:16,
A Blok Ümraniye / İstanbul, Türkiye
TEL: +90 216 499 99 10 Fax: + 90 216 499 80 70
Website: www.delta-turkey.com

Factory information:

Delta Electronics, Inc.

Taiwan

31-1 Xingbang Road,
Guishan Industrial Zone,
Taoyuan County 33370,
Taiwan
TEL: 886-3-362-6301
FAX: 886-3-362-7267

China

1688 Jiangxing East Road,
Wujiang Economic Development Zone
Wujiang City, Jiang Su Province,
People's Republic of China (Post code: 215200)
TEL: 86-512-6340-3008
FAX: 86-769-6340-7290



2023-09-06



5014148701-7W01

DOP-107WVCS

高彩·寬螢幕·友善人機介面

Delta Electronics Inc.,
No.18, Xinglong Rd., Taoyuan City 33068, Taiwan

安裝說明

(1) 一般注意事項

感謝您使用本產品，本人機介面安裝說明書提供 DOP-100 系列人機介面的相關資訊。在使用之前，請您仔細詳讀本說明書以確保能正確使用本產品。此外，請妥善將本說明書放置在明顯的地點以便隨時查閱。在您尚未讀完本說明書前，請務必遵守下列事項：

- 使用操作面板前，請先撕下保護膜。
- 安裝的環境可承受高亮度、紫外線照射、高震動與適應極端溫度的場所。
- 接線時，請依接線圖說明施工。
- 接地工程必須確實實施，接地時須遵照國家現行相關電工法規之規定施行（請參考 NFPA 70: National Electrical Code, 2005 Ed.）。
- 通電時，請勿拆解人機介面或更改配線。
- 通電運作時，請勿接觸電源處，以免觸電。
- 當程式顯示電量不足時須更換電池，請聯絡台達電子或當地經銷商，請勿自行更換。
- 此產品適用於工業自動化設備，請詳細閱讀此說明，並依指示安裝避免產生危險。
- 清潔方式：請以乾布擦拭清潔。
- 適用之海拔高度為 5000 米(16404.2 英尺)以下。
- 若使用本設備時未遵循製造商所訂定之規格，將導致本設備所提供的保護功能受損。
- 維修請聯絡：台達電子工業股份有限公司，台灣桃園市興隆路 18 號，TEL: 03-3626301。

如果您在使用上仍有問題，請洽詢經銷商或者本公司客服中心。由於產品精益求精，當內容規格有所修正時，請洽詢代理商或至台達網站 (<https://www.deltaww.com/zh-tw/index>) 下載最新版本。

(2) 通訊腳位定義

DOP-107WVCS COM1 定義

COM Port 示意圖	腳位	MODE1
		RS-232
	1	
	2	RXD
	3	TXD
	4	
	5	GND
	6	
	7	RTS
	8	CTS
	9	

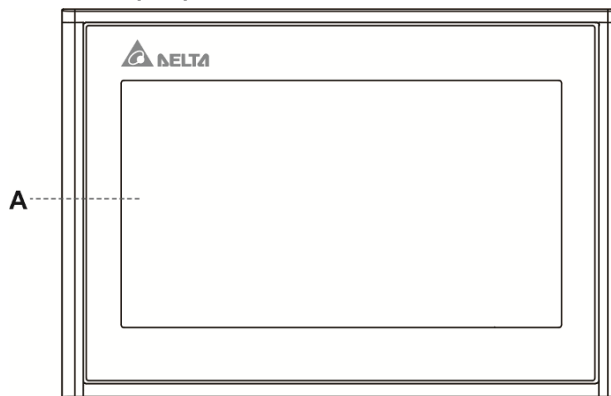
DOP-107WVCS COM2 定義

COM Port 示意圖	腳位	MODE1		MODE2		MODE3	
		COM2	COM3	COM2	COM3	COM2	COM3
		RS-232	RS-485	RS-485	RS-485	RS-232	RS-422
	1			D+			TXD+
	2	RXD				RXD	
	3	TXD				TXD	
	4		D+		D+		RXD+
	5	GND		GND		GND	
	6			D-			TXD-
	7	RTS				RTS	
	8	CTS				CTS	
	9		D-	D-			RXD-

註 1：空白 = 不需連接

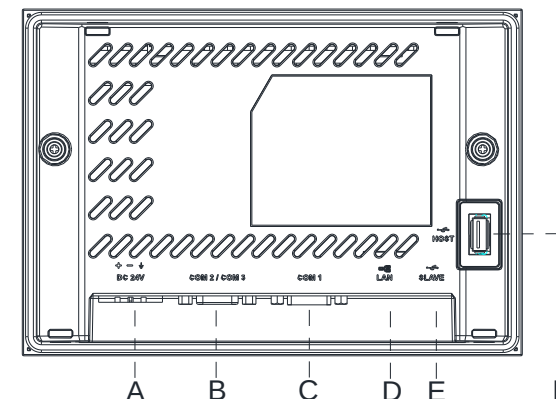
(3) 各部位說明

DOP-107WVCS (正面)



A 操作 / 顯示區域

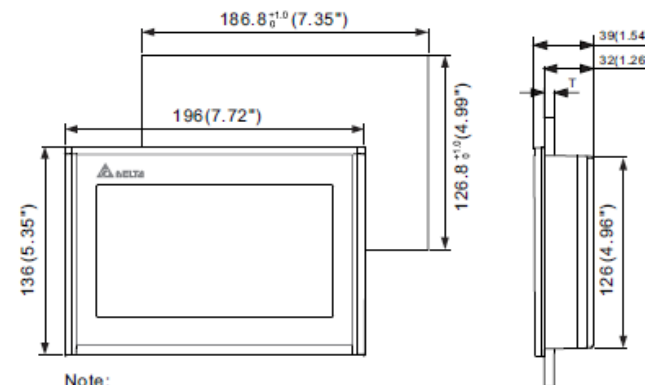
DOP-107WVCS (背面)



A	電源輸入端子 (24AWG wire min.)	B	COM2/ COM3
C	COM1	D	網路埠 (LAN)
E	USB Slave	F	USB Host

(4) 開孔尺寸

DOP-107WVCS

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

操作溫度為 -30°C ~ +70°C、儲存溫度為 -40°C ~ +80°C

(5) 安裝方向與配線

注意事項：

- 安裝方向必須依圖面所示，否則會造成故障。
- 為了使冷卻循環效果良好，安裝人機介面時，其上下左右與相鄰的物品和擋板(牆)必須保持足夠的空間，否則會造成散熱不良。

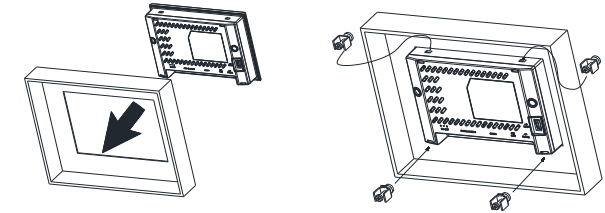
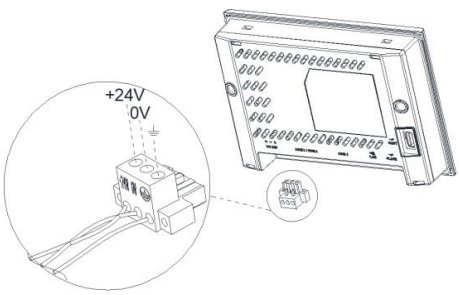
- 使用於 Type 4X 室內 / 室外用等級之外殼平面。
- 安裝面板最大板厚請勿超過 5 mm (0.2 inches)。

安裝示意圖：

- 步驟一：

請確實套上防水墊圈，然後再安裝人機介面。
- 步驟二：

請確實將固定片螺絲組裝入內，然後下方鉤住前蓋螺絲頭頂住控制箱內側。

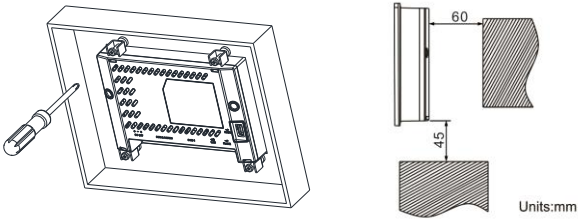


- 步驟三：

請以 0.5 N-M ~ 0.7 N-M 的扭力鎖緊螺絲，請勿超過此扭力，否則將損壞塑膠外殼。
- 步驟四：

安裝時，請在人機後方及下方各預留 60 mm(2.36 inches)及 45 mm (1.77 inches) 的散熱空間。

DOP-107WVCS 扭力: 6.17lb-inch (0.7N-M)



配線：

種類	材質	電源配線(AWG)	剝線長度	扭力
單芯線	銅	24 ~ 12	7 ~ 8 mm (0.28 ~ 0.31 inches)	5 kg-cm (4.3 lb-in)
多芯線	銅	24 ~ 12	7 ~ 8 mm (0.28 ~ 0.31 inches)	5 kg-cm (4.3 lb-in)



請參考下圖電源接頭端子進行配線，安裝與配線要求至少使用等級 75 度以上：

請參考下圖電源接頭端子進行配線，安裝與配線要求至少使用耐溫等級 75°C (167°F)以上之線材：

(6) 硬體規格

型號	DOP-107WVCS
面板種類	7" TFT LCD (65535 色)
顯示器	解析度 800 x 480 pixels
背光燈	LED Back Light (常溫 25°C 下半衰期>2 萬小時) (Note 1)
顯示範圍	154.08 x 85.92 mm
亮度	1000 cd/m ² (Typ.)
中央處理器	ARM Cortex-A8 (1GHz)
Flash ROM	1000 Mbytes
RAM	1000 Mbytes
觸控面板	四線電阻式 > 10,000,000 operated
蜂鳴器	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB
網路介面	1 Port, 10/100 Mbps 自動偵測 (內建隔離電路 (Note 2))
USB	1 USB Slave Ver 2.0 1 USB Host Ver 2.0
SD	N/A
串列通訊埠	COM1 RS-232(支援流量控制) (Note 2)
	COM2 RS-232(支援流量控制) / RS-485(Note 2)
	COM3 RS-422 / RS-485(Note 2)
萬年曆	內建
冷卻方式	自然冷卻
安規認證	CE / UL (請使用 shielding 網路線與使用磁環 300ohm/100MHz 濾波)
面板防水等級	IP 66/NEMA 4/Type 12/Type 4X (indoor and outdoor use)
工作電壓 (Note2)	DC +24V (-15% ~ +20%) (請使用隔離式電源供應器) Supplied by Class 2 or SELV circuit (isolated from MAINS by double insulation)

絕緣耐力	DC24V 端子與 FG 端子間：AC500V, 1 分鐘
消耗功率 (Note 2)	8.4W (Max) (Note 3)
記憶體備份電池	3V 鋰電池 CR2032 × 1
備份電池壽命	依使用環境溫度及使用條件而不同，常溫 25°C 下壽命約三年以上
操作溫度	-30°C ~ +70°C
儲存溫度	-40°C ~ +80°C
工作環境	10%~95%RH【0~40°C】、10%~55%RH【41~50°C】、10%~20%RH【51~70°C】、污染等級 1
儲存環境	10%~95%RH【0~40°C】、10%~55%RH【41~50°C】、10%~20%RH【51~80°C】
耐震動	IEC61131-2 規定連續震動 5Hz~8.3Hz 3.5mm, 8.3Hz~150Hz 1G
耐衝擊	IEC60068-2-27 規定耐衝擊 11ms, 15G Peak, X, Y, Z 方向各 6 次
尺寸 (W) x (H) x (D) mm	196 x 136 x 39
開孔尺寸 (W) x (H) mm	186.8 x 126.8
重量	約 560g

註：

- 背光模組半衰期的定義：最大驅動電流下，背光亮度衰退到最大亮度的一半時，即為半衰期。所標示之壽命時間為 25 °C (77°F) 常溫常濕工作環境下之預估值。
- 隔離電路耐受規格：可承受 1 分鐘 1500 V 高壓突波。
- 消耗功率為無外接週邊設備時，人機本體所消耗的功率。建議選用的電源供應器容量為標示消耗功率之 1.5 ~ 2 倍，以確保人機工作正常。
- 建議使用隔離式電源供應器。
- DOP-100 系列編輯軟體 DIAScreen 系列及其使用操作手冊，可由台灣網站下載取得，網址為 <https://www.deltaww.com/zh-tw/index>。
- DOP-100 系列適用於工業自動化設備，請詳細閱讀此說明，並依指示安裝避免產生危險。



2023-09-06



5014148701-7W01

DOP-107WVCS

高彩·宽屏幕·友善人机接口

Delta Electronics Inc.,

No.18, Xinglong Rd., Taoyuan City 33068, Taiwan

安装说明

(1) 一般注意事项

感谢您使用本产品，本人机接口安装说明书提供 DOP-100 系列人机接口的相关信息。在使用之前，请您仔细阅读本说明书以确保能正确使用本产品。此外，请妥善将本说明书放置在明显的地点以便随时查阅。在您尚未读完本说明书前，请务必遵守下列事项：

- 使用操作面板前，请先撕下保护膜。
- 安装的环境可承受高亮度、紫外线照射、高震动与适应极端温度的场所。
- 接线时，请依接线图说明施工。
- 接地工程必须确实实施，接地时须遵照国家现行相关电工法规之规定施行（请参考 NFPA 70: National Electrical Code, 2005 Ed.）。
- 通电时，请勿拆解人机接口或更改配线。
- 通电运作时，请勿接触电源处，以免触电。
- 当程序显示电量不足时须更换电池，请联络台达电子或当地经销商，请勿自行更换。
- 此产品适用于工业自动化设备，请详细阅读此说明，并依指示安装避免产生危险。
- 清洁方式：请以干布擦拭清洁。
- 适用之海拔高度为 5000 米(16404.2 英尺)以下。
- 若使用本设备时未遵循制造商所订定之规格，将导致本设备所提供的保护功能受损。
- 维修请联络：台达电子工业股份有限公司，台湾桃园市兴隆路 18 号，TEL: 03-3626301。

如果您在使用上仍有问题，请洽询经销商或者本公司客服中心。由于产品精益求精，当内容规格有所修正时，请洽询代理商或至台达网站 (<https://www.deltaww.com/zh-tw/index>) 下载最新版本。

(2) 通讯脚位定义

DOP-107WVCS COM1 定义

COM Port 示意图	脚位	MODE1
		RS-232
	1	
	2	RXD
	3	TXD

1	4	
2	5	GND
3	6	
4	7	RTS
5	8	CTS
6	9	

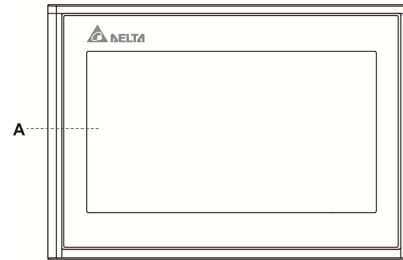
DOP-107WVCS COM2 定义

COM Port 示意图	脚位	MODE1		MODE2		MODE3	
		COM2	COM3	COM2	COM3	COM2	COM3
		RS-232	RS-485	RS-485	RS-485	RS-232	RS-422
	1			D+			TXD+
	2	RXD				RXD	
	3	TXD				TXD	
	4		D+		D+		RXD+
	5	GND		GND		GND	
	6			D-			TXD-
	7	RTS				RTS	
	8	CTS				CTS	
	9		D-		D-		RXD-

注 1: 空白 = 不需连接

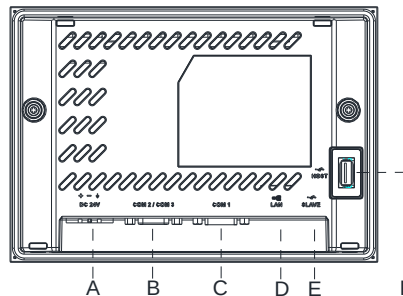
(3) 各部位说明

DOP-107WVCS (正面)



A 操作 / 显示区域

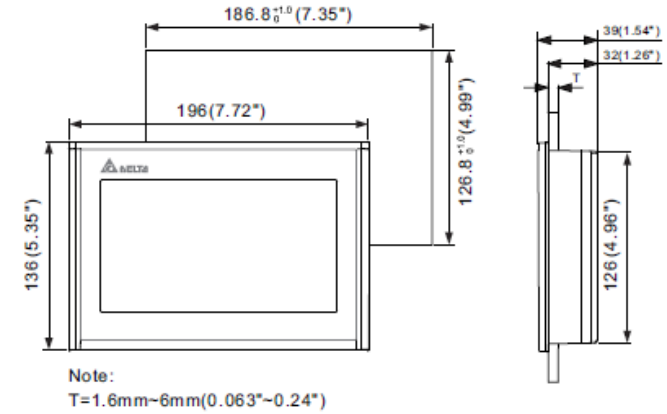
DOP-107WVCS (背面)



A	电源输入端子 (24AWG wire min.)	B	COM2/ COM3
C	COM1	D	网络端口 (LAN)
E	USB Slave	F	USB Host

(4) 开孔尺寸

DOP-107WVCS



操作温度为 -30°C ~ +70°C、储存温度为 -40°C ~ +80°C

(5) 安装方向与配线

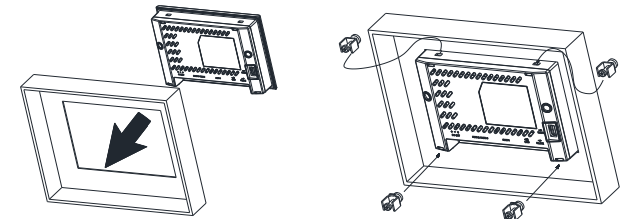
注意事项：

- 安装方向必须依图面所示，否则会造成故障。
- 为了使冷却循环效果良好，安装人机接口时，其上下左右与相邻的物品和挡板(墙)必须保持足够的空间，否则会造成散热不良。
- 使用于 Type 4X 室内 / 室外用等级之外壳平面。
- 安装面板最大板厚请勿超过 5 mm (0.2 inches)。

安装示意图：

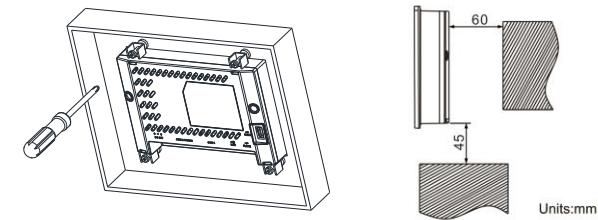
步骤一：
请确实套上防水垫圈，然后再安装
人机接口。

步骤二：
请确实将固定片螺丝组装入内，
然后下方钩住前盖螺丝头顶住
控制箱内侧。



步骤三：
请以 0.5 N-M ~ 0.7 N-M 的扭力锁
紧螺丝，请勿超过此扭力，否则将
损坏塑料外壳。
DOP-107WVCS 扭力: 6.17lb-inch
(0.7N-M)

步骤四：
安装时，请在人机后方及下方各
预留 60 mm (2.36 inches) 及 45
mm (1.77 inches) 的散热空间。

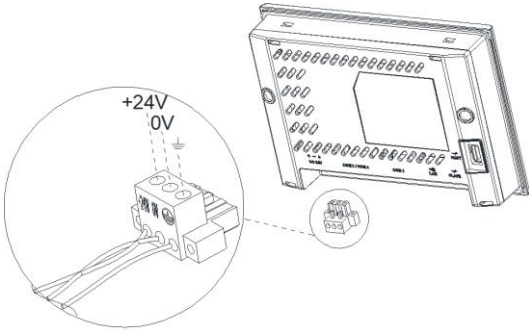


配线:

种类	材質	电源配线(AWG)	剥线长度	扭力
单芯线	銅	24 ~ 12	7 ~ 8 mm (0.28 ~ 0.31 inches)	5 kg-cm (4.3 lb-in)
多芯线	銅	24 ~ 12	7 ~ 8 mm (0.28 ~ 0.31 inches)	5 kg-cm (4.3 lb-in)



请参考下图电源接头端子进行配线, 安装与配线要求至少使用耐温等级 75°C (167°F)以上之线材:



(6) 硬件规格

型号	DOP-107WVCS
面板种类	7" TFT LCD (65535 色)
分辨率	800 x 480 pixels
背光灯	LED Back Light (常温 25°C 下半衰期>2 万小时) (Note 1)
显示范围	154.08 x 85.92 mm
亮度	1000 cd/m² (Typ.)
中央处理器	ARM Cortex-A8 (1GHz)
Flash ROM	1000 Mbytes
RAM	1000 Mbytes
触控面板	四线电阻式 > 10,000,000 operated

蜂鸣器	Multi-Tone Frequency (2K ~ 4K Hz) / 80dB
网络接口	1 Port, 10/100 Mbps 自动侦测 (内建隔离电路 (Note 2))
USB	1 USB Slave Ver 2.0 1 USB Host Ver 2.0
SD	N/A
串行通讯端口	COM1 RS-232(支持流量控制) (Note 2)
	COM2 RS-232(支持流量控制) / RS-485 (Note 2)
	COM3 RS-422 / RS-485 (Note 2)
万年历	内建
冷却方式	自然冷却
安规认证	CE / UL (请使用 shielding 网络线及使用磁环 300ohm/100MHz 滤波)
面板防水等级	IP 66/NEMA 4/Type 12/Type 4X (indoor and outdoor use)
工作电压 (Note2)	DC +24V (-15% ~ +20%) (请使用隔离式电源供应器) Supplied by Class 2 or SELV circuit (isolated from MAINS by double insulation)
绝缘耐力	DC24V 端子与 FG 端子间: AC500V, 1 分钟
消耗功率 (Note 2)	8.4W (Max) (Note 3)
内存备份电池	3V 锂电池 CR2032 × 1
备份电池寿命	依使用环境温度及使用条件而不同, 常温 25°C 下寿命约三年以上
操作温度	-30°C ~ +70°C
储存温度	-40°C ~ +80°C
工作环境	10%~90%RH 【0~40°C】、10%~55%RH 【41~50°C】、 10%~20%RH 【51~70°C】、污染等级 1
储存环境	10%~95%RH 【0~40°C】、10%~55%RH 【41~50°C】、 10%~20%RH 【51~80°C】
耐震动	IEC61131-2 规定连续震动 5Hz~8.3Hz 3.5mm, 8.3Hz~150Hz 1G
耐冲击	IEC60068-2-27 规定耐冲击 11ms, 15G Peak, X, Y, Z 方向各 6 次
尺寸 (W) x (H) x (D) mm	196 x 136 x 39
开孔尺寸 (W) x (H) mm	186.8 x 126.8
重量	约 560g

注:

13. 背光模块半衰期的定义: 最大驱动电流下, 背光亮度衰退到最大亮度的一半时, 即为半衰期。所标示之寿命时间为 25°C (77°F) 常温常湿工作环境下之预估值。
14. 隔离电路耐受规格: 可承受 1 分钟 1500 V 高压突波。

15. 消耗功率为无外接外围设备时, 人机本体所消耗的功率。建议选用的电源供应器容量为标示消耗功率之 1.5 ~ 2 倍, 以确保人机工作正常。
16. 建议使用隔离式电源供应器。
17. DOP-100 系列编辑软件 DIAScreen 系列及其使用操作手册, 可由台达网站下载取得, 网址为 <https://www.deltawww.com/zh-tw/index>。
18. DOP-100 系列适用于工业自动化设备, 请详细阅读此说明, 并依指示安装避免产生危险。

部件名称 Part Name	有毒物质 -Hazardous Substances					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr VI)	多溴联苯(PBB)	多溴二苯醚(PBDE)
金属部件 Metal Part	X	O	O	O	O	O
塑料部件 Plastic Part	O	O	O	O	O	O
电子件 Electronic	X	O	O	O	O	O
触点 Contacts	O	O	X	O	O	O
线缆和线缆附件 Cable & Cabling accessories	X	O	O	O	O	O
电池 Battery	O	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。

O : 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X : 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。



This table is made according to SJ/T 11364. 5014052100
O: Indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.
X: Indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.