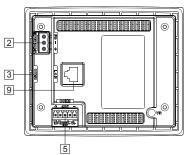
Installation guide / 安裝手冊 / 安装手册

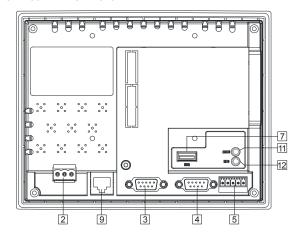
# WebOP-2000 Series

Rear view / 後視圖 / 后视图

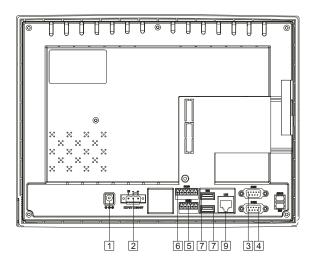
WOP-2035V



WOP-2057V / WOP-2070V



WOP-2080V / WOP-2104V / WOP-2121V



Model	А	В	С	L	Н
WOP-2035V	130 mm / 5.11"	106.2 mm / 4.18"	45 mm / 1.77"	118.5 mm / 4.66"	92.5 mm / 3.64"
WOP-2057V	187 mm / 7.36"	145.7 mm / 5.73"	45 mm / 1.77"	174.5 mm / 6.87"	132.5 mm / 5.21"
WOP-2070V	188 mm / 7.4"	143.3 mm / 5.64"	40 mm / 1.57"	174.5 mm / 6.87"	132.5 mm / 5.21"
WOP-2080V	232.5 mm / 9.15"	175.8 mm / 6.92"	42.9 mm / 1.69"	221 mm / 8.7"	164 mm / 6.46"
WOP-2104V	297 mm / 11.6"	224 mm / 8.8"	52 mm / 2.04"	285.5 mm / 11.24"	210.5 mm / 8.28"
WOP-2121V	315 mm / 12.4"	241 mm / 9.48"	54.5 mm / 2.14"	301.5 mm / 11.87"	228 mm / 8.97"
WOP-2040T	130 mm / 5.11"	106.2 mm / 4.18"	36.4 mm / 1.43"	118.5 mm / 4.66"	92.5 mm / 3.64"
WOP-2050T	188 mm / 7.4"	143.3 mm / 5.64"	30 mm / 1.18"	175 mm / 6.89"	132.5 mm / 5.21"
WOP-2070T	188 mm / 7.4"	143.3 mm / 5.64"	30 mm / 1.18"	175 mm / 6.89"	132.5 mm / 5.21"
WOP-2080T	231.5 mm / 9.11"	174.6 mm / 6.87"	37 mm / 1.46"	221 mm / 8.7"	164 mm / 6.46"
WOP-2100T	269.8 mm / 10.62"	212 mm / 8.35"	37.4 mm / 1.47"	259.5 mm / 10.22"	201.5 mm / 7.93"
WOP-2040K	130 mm / 5.11"	106.2 mm / 4.18"	36.4 mm / 1.43"	118.5 mm / 4.66"	92.5 mm / 3.64"
WOP-2070K	204.4 mm / 8.05"	151 mm / 5.94"	26.5 mm / 1.04"	191.5 mm / 7.54"	138 mm / 5.43"
WOP-2100K	269.8 mm / 10.62"	212 mm / 8.35"	37.4 mm / 1.47"	259.5 mm / 10.22"	201.5 mm / 7.93"

http://www.advantech.com/WebOP/

Thank you for purchasing Advantech products, please visit our official website to download WebOP Designer software. 感謝您購買研華科技產品, 請您至研華官方網站下載 WebOP Designer 軟體。 感谢您购买研华科技产品, 请您至研华官方网站下载 WebOP Designer 组态软件

# Parts Introduction / 裝置介紹 / 装置介绍

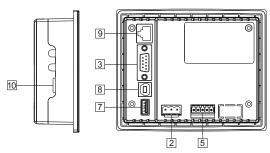
- 1 Power Connector (DC Jack) / 電源端子(DC Jack) / 电源端子 (DC Jack)
- 2 Power Connector (Terminal) / 電源端子(Terminal) / 电源端子 (Terminal)
- 3 COM 1 9-Pin Female / COM 1 9-Pin 母頭 / COM 1 9-Pin 母头
- 4 COM 2 9-Pin Male / COM 2 9-Pin 公頭 / COM 2 9-Pin 公头
- [5] COM 2 5-Pin (Terminal) / COM 2 5-Pin (端子台) / COM 2 5-Pin (端子台)
- [6] COM 3 6-Pin (Terminal) / COM 3 6-Pin (端子台) / COM 3 6-Pin (端子台)
- 7 USB Connector (Type-A) / USB 接口 (Type-A) / USB 接口 (Type-A)
- 8 USB Connector (Type-B) / USB 接口 (Type-B) / USB 接口 (Type-B)
- 9 Ethernet port (N models only) / 網路接口 (僅N系列機型支援)

/ 网路接口 (仅N系列机型支援)

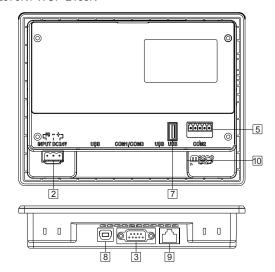
- 10 Micro-SD Slot / Micro-SD 插槽 / Micro-SD 插槽
- [11] Audio / 音效輸出接口 / 音效输出接口
- [12] Mic / 麥克風輸入接口 / 麦克风输入接口

### WOP-2040T / WOP-2040K

Outlet / 外觀尺寸 / 外观尺寸



WOP-2050T / WOP-2070T / WOP-2080T / WOP-2100T WOP-2070K / WOP-2100K



# B H H C I 6mm L

Cut-out/開孔尺寸/开孔尺寸

Installation guide / 安裝手冊 / 安装手册

# WebOP-2000 Series

# Connections / 腳位圖 / 脚位图

### WOP-2000V Series

COM 1 DB-9 Female / DB-9 母頭 / DB-9 母头

Pin	Description
1	RD-422 TXD+ / RS-485+
2	RS-232 RXD
3	RS-232 TXD
4	RS-422 RXD+
5	GND
6	RS-422 TXD- / RS-485-
7	RS-232 RTS
8	RS-232 CTS
9	RS-422 RXD-

### WOP-2000T / WOP-2000K Series

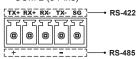
COM 1 DB-9 Female / DB-9 母頭 / DB-9 母头

Pin	Description	
1	RS-422 TXD+ / RS-485+	
2	RS-232 RXD	
3	RS-232 TXD	
4	RS-422 RXD+	
5	GND	
6	RS-422 TXD- / RS-485-	
7	RS-232 TXD (COM 3)	
8	RS-232 RXD (COM 3)	
9	RS-422 RXD-	

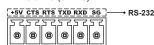
COM 2 DB-9 Male / DB-9 公頭 / DB-9 公头

Pin	Description
1	-
2	RS-232 RXD
3	RS-232 TXD
4	-
5	GND
6	-
7	RS-232 RTS
8	RS-232 CTS
9	Optional 5V output





COM 3 (6 Pins)



### Download Cable / 程式下載線 / 程式下载线

COM 1					
COM 1 Connector 9-Pin Female		PC Connector 9-Pin Male			
RXD TXD SG	2 — 3 3 — 2 5 — 5	TXD RXD SG			
COM 2					
COM 2 Connector 9-Pin Male		PC Connector 9-Pin Male			
RXD TXD SG	2 — 3 3 — 2 5 — 5	TXD RXD SG			
COM 3 DB-9 (T series only)					
COM 3 Connector 9-Pin Female		PC Connector 9-Pin Male			
RXD TXD SG	8 — 3 7 — 2 5 — 5	TXD RXD SG			
COM 3 6-Pin Terminal(V series only)					
COM 3 Connector 6-Pin Terminal		PC Connector 9-Pin Male			
RXD TXD SG	5 — 3 4 — 2 6 — 5	TXD RXD SG			

The products have been designed for use in an industrial environment in compliance with the

2004/108/CE directive. 本產品適用於工業環境並符合2004/108/CE規範

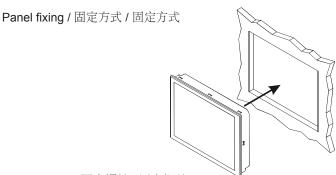
The products have been designed in compliance with:

本產品符合以下法規

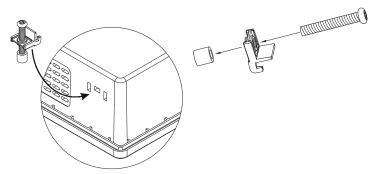
EN 61000-6-4	EN 55022 Class A
EN 61000-6-2	EN 61000-4-2
	EN 61000-4-3 EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-8
	EN 61000-4-11

The installation of these devices into the residential, commercial and light-industrial environments is allowed only in the case that special measures are taken in order to get the conformity to IEC-61000-

55. 本產品若要安裝於住宅:商業及輕工業的環境時,必須加測特殊檢驗以符合IEC-61000-6-3



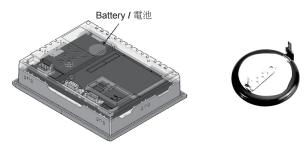
Fixing Screw / 固定螺絲 / 固定螺丝





Screw each fixing screw until the bezel corner gets in contact with the panel. 使用固定螺絲固定時請注意不要鎖太緊,以避免壓迫造成其他問題。 使用固定螺丝固定时请注意不要锁太紧,以避免压迫造成其他问题。

### Dispose of batteries / 電池處置 / 电池处置



MATSUSHITA/PANASONIC 3V 50mAh Vanadium Lithium Rechargeable Battery type



Dispose of batteries according to local regulations. 廢棄電池的處置請依據使用者所在地對廢棄電池處置方式辦理 废弃电池的处置请依据使用者所在地对废弃电池处置方式办理



24V

0V

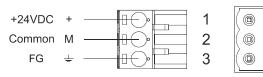
100% battery capacity can hold for 5 months without power supply in general enviroment. Please charge at least 72hrs within the hold up time. The data in

the memory maybe incorrect under low battery condition. 電池電量100%時,在斷電停機狀態下能保持五個月(一般環境),請在保持時間內充電72小時,因電量不足的情況下易造成記憶體資料不正確。 电池电量100%时,在断电停机状态下能保持五个月(一般环境),请在保持时间内充电72小时,因电量不足的情况下易造成记忆体资料不正确。

### Power supply / 電源供應 / 电源供应



Powered by a Low Voltage / Limited Energy power source. 以低電壓提供電力 / 限制能量電源。 / 以低电压提供电力 / 限制能量电源。

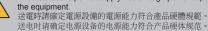




Do not open the rear cover of the panel when power is applied. 電源送電時請勿開啟後殼。 / 电源送电时请勿开启后壳



Ensure that the power supply has enough power capacity for the operation of



Reproduction of the contents of this copyrighted document, in whole or part, without written permission of Advantech Inc., is prohibited. 本文件內容版權Advantech Inc所有.

非經本公司同意.請勿自行重製;拷貝或修正此文件內容。



### Safety instructions

- 1. Read these safety instructions carefully.
- 2. Keep this user manual for later reference.
- Disconnect this equipment from AC outlet before cleaning. Do not use liquid or spray detergents for cleaning.
- 4. For pluggable equipment, the power outlet shall be installed near the equipment and shall be easily accessible.
- 5. Keep this equipment away from humidity.
- 6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- 7. Do not leave this equipment in an environment unconditioned where the storage temperature under 0°C (32°F) or above 50°C (122°F), it may damage the equipment.
- The openings on the enclosure are for air convection hence protects the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- 10. Place the power cord such a way that people can not step on it. Do not place anything over the power cord. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product.
- 11. All cautions and warnings on the equipment should be noted.
- 12. If the equipment is not used for long time, disconnect it from the power source to avoid being damaged by transient over-voltage.
- 13. Never pour any liquid into ventilation openings. This could cause fire or electrical shock.
- 14. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
- 15. If any of the following situations arises, get the equipment checked by service personnel:
  - a. The power cord or plug is damaged.
  - b.Liquid has penetrated into the equipment.
  - c.The equipment has been exposed to moisture.
  - d.The equipment does not work well or you cannot get it to work according to user manual.
  - e. The equipment has been dropped and damaged.
  - f.The equipment has obvious signs of breakage.
- 16. CAUTION: The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions.
- 17. THE COMPUTER IS PROVIDED WITH CD DRIVES COMPLY WITH APPROPRIATE SAFETY STANDARDS INCLUDING IEC 60825.

CALSS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT

- 18. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
  - (1) this device may not cause harmful interference, and
  - (2) this device must accept any interference received, including interference that may cause undesired operation.
- 19. CAUTION: Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges.

- 20. CAUTION: Always ground yourself to remove any static charge before touching the motherboard, backplane, or add-on cards. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis.
- 21. CAUTION: Any unverified component could cause unexpected damage.
  To ensure the correct installation, please always use the components
  (ex. screws) provided with the accessory box.
- 22. Caution text concerning lithium batteries:

### ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tibage tilleverandøren.

# ADIANTECH Trusted ePlatform Services

### 安全指南

- 1.請仔細閱讀本安全指南。
- 2.收好此份用使用者操作手册以供稍後參考之用。
- 3.在進行清潔工作之前,請將本設備與任何交流電源插座切斷。請用濕布清潔, 不可使用液態或噴霧式清潔劑清洗。
- 4.外掛式設備必須安置在容易使用的插座附近。
- 5.請遠離潮濕的處所。
- 6.安裝時請將本設備至於平穩的處所。意外摔落或掉落將對本設備造成傷害。
- 7. 周圍的開口是作爲空氣對流之用。爲避免本設備過熱,請不要遮住開口。
- 8.連接電源前請確認電源的電壓正確無誤。
- 9.請確定電源線的位置,以防備人踩踏。電源線上方請勿放置任何物品。
- 10.請注意本設備上所有的警告和警語。
- 11.如果設備很久沒被使用,請將電源切斷以防止電壓瞬間過高所產生的損壞。
- 12.禁止將任何液體倒入開口。這可能會引起火災或者電擊。
- 13.禁止拆開本設備。基於安全理由,本設備應該只能由合格的維修人員進行拆裝。 14.如果有下列任何一種情形,請找維修人員進行檢查:
  - a雷源線或插頭指壞。
  - b.液體滲入本設備。
  - c本設備受潮。
  - d.本設備發生故障,或者無法依據使用者操作手冊來讓本設備運作。
  - e.如果本設備不慎掉落而發生損壞。
  - f本設備有明顯的破損痕跡。
- 15.請勿將本設備儲存在低於攝氏-10℃或高於攝氏60℃的環境下,這可能會損壞本設備。
- 16.警告:如果替換的電池不正確,將導致爆炸的危險。請使用製造商所推薦或相同型式 的替換電池,並依製造商指示處理廢棄的電池。
- 17.依照IEC 704-1:1982所規範的標準,在操作者位置上的音壓強度不得高過70分貝(A)。
- 18.青仟規範聲明:本指南是根據依照IEC 704-1所制定。研華科技有限公司對其中所含 任何陳述的準確與否不負任何責任。

### 19.關於鋰電池的警告交字

警告事項: 若更換電池不當,可能會有爆炸的危險。 請僅更換相同的電池或 設備製造商建議同等類型電池。請依據製造商的指示丟棄用完的電池。

·級雷射輻射產品

# ADIANTECH Trusted ePlatform Services

## 安全指示

- 1. 请仔细阅读此安全手册
- 2. 请妥善保存此安全手册供日后参考
- 3. 清洗设备前,请从插座拔下电源线。请不要使用液体或去污喷雾剂去清洗设备。
- 4. 对于使用电源线的设备,设备周围必须有容易接触到的电源插座。
- 5. 请不要在潮湿环境中使用设备。
- 6. 请在安装前确保设备放置在可靠的平面上,意外跌落可能会导致问题。
- 7. 请不要把设备放置在超出我们建议的环境范围,即不要低于0°C (32°F), 高过50℃ (122°F),这有可能会损坏设备。
- 8. 设备外壳的开口是用于空气对流,从而防止设备过热。请不要覆盖这些开口。
- 9. 当您连接设备到电源插座上前,请确认电源插座的电压是否符合要求。
- 10.将电源线布置在人们不易绊到的位置,并不要在电源在线覆盖任何杂物。电源线的电压 和电流的范围应该大于设备本身标识的电压电流范围值。
- 11.请注意设备上的所有警告和注意标语。
- 12.如果长时间不使用设备,请将其同电源插座断开,避免设备被超标的电压波动损坏。
- 13.请不要让任何液体流入通风口,以免引起火灾或者短路。
- 14.请不要自行打开设备。为了确保您的安全,请由经过认证的工程师来打开设备。
- 15.如遇下列情况,请由专业人员来维修
  - (a)电源线或者插头损坏。
  - (b)设备内部有液体流入
  - (c)设备曾暴露在过于潮湿的环境中使用
  - (d) 设备无法正常工作,或您无法通过用户手册来使其正常工作。
  - (e) 设备曾经跌落或者损坏过。
  - (f) 设备有明显的外观破损

### 16.警告:

The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions.

17 THE COMPUTER IS PROVIDED WITH CD DRIVES COMPLY WITH APPROPRIATE SAFETY STANDARDS INCLUDING IEC 60825.

> **CALSS 1 LASER PRODUCT** KLASSE 1 LASER PRODUKT

### 18.该产品满足如下安规警告:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference,
- (2) this device must accept any interference received, including interference that may cause undesired operation
- 19.警告 当您对设备进行检测工作时,请务必把电源线拔下。当机箱上电源开关打开时, 请不要直接连接电源线,以避免瞬间的电涌损坏敏感的电子组件。
- 20.警告 在您接触母板,无源底板或扩展卡等电子设备时,请先确保您接地来移除身上 附带的静电。由于现在的电子设备对静电十分敏感,为了安全起见,请使用接地腕环, 并在取出电子设备时,把他们放在无静电的表面或静电屏蔽袋中。
- 21.警告任何未经我们认证的零配件都可能会导致无法预计的损坏。为了确保正确的安装, 请使用附件盒中提供的零件(如螺丝)。
- 22.本产品不带电源线组销售,需用户购买符合CCC要求的电源线组。
- 23.本产品不带电源適配器销售,需用户购买符合CCC要求的电源適配器。
- 24.本产品为A级产品,在生活环境中,该产品可能会造成无线电干扰。 在这种情况下,可能需要用户对干扰采取切实可行的措施。
- 25.本产品预期使用的最大海拔高度说明:由最终选用的供电电源决定其适用的海拔地区。