

支持的设备型号
Supported Models

V304E V307S V307E V310S V310E V315E V315E-4G V315E-WIFI
V300-4G-ADP V300-WIFI-ADP



禾川科技官方网站

HPPT0050001-00B
Date 2024-10-30
CN 安装说明
EN Instruction Sheet

1. 安全注意事项 (Safety precautions)

本说明书涉及产品均为开放型外壳设计。要求用户使用产品时，务必将产品安装于具有防尘、防潮以及免于电击 / 冲击等意外的控制柜内，并且需要设置保护措施以防止非维护人员不当操作或意外导致设备故障或损坏，造成不可避免的人员危险和财产损失。
The products involved are all open-type housing designs. Therefore they should be installed in a control cabinet that is free of airborne dust, humidity, electric shock, and vibration. The cabinet should prevent non-maintenance staff from operating the products or accidents from happening in case danger and damage may occur on the products.

更详细的信息请参考 V300 系列硬件手册。
Please refer to the V300 series hardware manual for more detailed information.

2. 通用电气及环境规格 (General electrical and environmental specifications)

2.1 通用电气规格 (Electrical specifications)			
型号 (Model)	额定功率: W	Rated power: W	额定电压
V304E	2.4	2.4	DC24V, 电压范围: DC19.2~28.8V
V307S	4.8	4.8	
V307E	4.8	4.8	
V310S	7.2	7.2	
V310E	7.2	7.2	
V315E	14.4	14.4	
V315E-4G	14.4	14.4	
V315E-WIFI	14.4	14.4	
V300-4G-ADP	—	—	由触摸屏供电
V300-WIFI-ADP	—	—	
			Powered by HMI

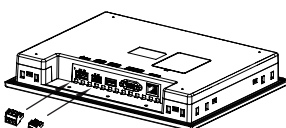
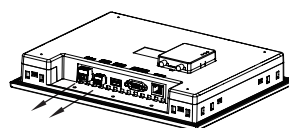
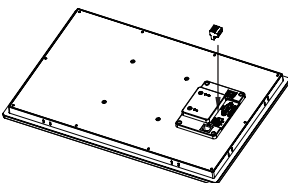
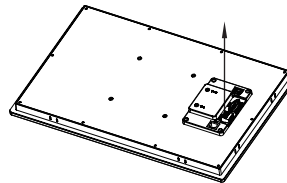
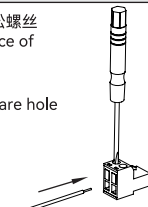
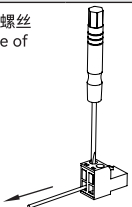
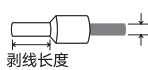
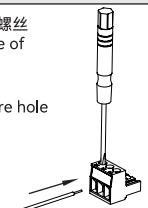
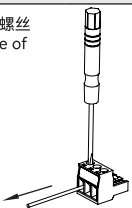
* 注：所有型号均为安全特低电压输入产品。
*Note: All models are featured by the SELV input type.

2.2 环境规格 (Environmental requirements)			
项目	Item	规格	Specifications
海拔高度	Altitude	≤2000m	≤2000m
使用环境	Operating environment	控制柜内安装，开放式及室内使用	Installation within a control cabinet, open-type and indoor use
工作温度	Operating temperature	-0~55℃	-0~55℃
储存温度	Storage temperature	-20~60℃	-20~60℃
环境湿度	Ambient humidity	10~95%RH (无结露)	10~95%RH (non-condensation)
振动耐受	Vibration resistance	5~150Hz (X/Y/Z方向, 1g/3.5mm位移)	5~150Hz (X/Y/Z direction, 1g /3.5mm displacement)
污染等级	Pollution degree	污染度II	Level 2
冷却方式	Cooling method	自然风冷	Natural air cooling
防护等级	IP rating	前面板 IP65, 后壳 IP20	Front panel: IP65, Back housing: IP20
外壳材质	Enclosure material	阻燃材料	Self-extinguishable

* 注：如果以制造商未规定的方式使用设备，可能会损坏设备。
*Note: The equipment may be damaged if used in a manner not specified by the manufacturer.

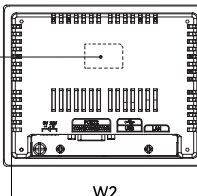
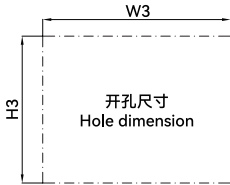
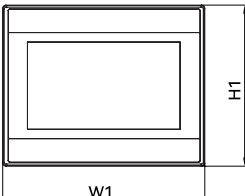
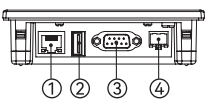
3. 安装说明 (Installation instructions)

3.1 控制柜安装 (Installation within a control cabinet)			
CN	装好防水垫圈后，将人机界面嵌入控制柜内。先将螺丝装入固定卡扣内，然后将卡扣底部对准人机界面侧边凹槽，螺丝头顶住控制柜内侧。以 0.5~0.7N.m 的扭力锁紧螺丝，请勿超过此扭力，否则会导致所料外壳损坏。请参考右侧示意图，在设备的周围留有足够的空间。	①安装防水垫圈 Install the waterproof gasket ②嵌入人机界面 Embed the HMI into the control cabinet	①将螺丝装入固定卡扣内 Install the screws into the fixing clips ②卡扣底部对准侧边凹槽 Align the bottom of the clips with the slots on the sides of the HMI
EN	After installing the waterproof gasket, embed the HMI into the control cabinet. Begin by installing the screws into the fixing clips and then align the bottom of the clips with the slots on the sides of the HMI. Place the screw heads against the inner side of the control cabinet. Lock the screws with a torque of 0.5~0.7N.m. It is important to not exceed this torque as it can cause damage to the housing of the material. Refer to the figures on the right to ensure that there is sufficient clearance around the device.	施加0.5~0.7N.m的扭力锁紧螺丝 Lock the screws with a torque of 0.5~0.7N.m	60.00mm 45.00mm
3.2 适配器拆装 (Adapter mounting and dismounting)			
CN	安装适配器时，将人机界面背面的盖子取下，然后将适配器插入，轻拽适配器，适配器不松动即成功安装；拆卸适配器时，将赠送的一字螺丝刀插入侧边凹槽，然后将适配器拔出。	②插入适配器 Insert the adapter	②拔出适配器 Detach the adapter
EN	During mounting, remove the cover on the back of the HMI first, then insert the adapter, and gently tug the adapter, if the adapter does not loosen, the installation is finished successfully. During dismounting, insert the flat-blade screwdriver into the side notch, and then detach the adapter.	①取下盖子 Remove the cover	①插入一字螺丝刀 Insert the flat-blade screwdriver
3.3 可拆卸端子拆装 1 (Removable terminal block mounting and dismounting I)			
CN	可拆卸端子拆装如右图所示。	沿箭头方向插入端子 Insert the terminal block along the direction indicated by the arrow	沿箭头方向拔出端子 Detach the terminal block along the direction indicated by the arrow
EN	The mounting and dis-mounting of the removable terminal block are shown in the figures on the right side.		

3.4 可拆卸端子拆装 2 (Removable terminal block mounting and dismounting II)						
CN	可拆卸端子拆装如右图所示。	沿箭头方向插入端子 Insert the terminal block along the direction indicated by the arrow				
EN	The mounting and dis-mounting of the removable terminal block are shown in the figures on the right side.	沿箭头方向拔出端子 Detach the terminal block along the direction indicated by the arrow				
3.5 可拆卸端子拆装 3 (Removable terminal block mounting and dismounting III)						
CN	可拆卸端子拆装如右图所示。	沿箭头方向插入端子 Insert the terminal block along the direction indicated by the arrow				
EN	The mounting and dis-mounting of the removable terminal block are shown in the figures on the right side.	沿箭头方向拔出端子 Detach the terminal block along the direction indicated by the arrow				
3.6 线缆拆装 1 (Cable connecting and disconnecting I)						
CN	安装线缆时，将一字螺丝刀对准可拆卸端子螺丝，施加 0.5~0.7N.m 的扭力拧松螺丝，将准备好的线缆插入到方孔中，拧紧螺丝，拔出一字螺丝刀，轻拽线缆，线缆不松动即成功完成配线；反之即可取出线缆。端子规格及配线示意图如右图所示。	①施加0.5~0.7N.m的扭力拧松螺丝 Loosen the screw with a force of 0.5~0.7N.m ②将线缆插入方孔中 Insert the cable into the square hole ③拧紧螺丝 Tighten the screw				
EN	During connecting, align the flat-blade screwdriver with the screw and loosen it with a force of 0.5~0.7N.m. Then insert a cable into the square hole, and then tighten the screw with the screwdriver. Gently tug the cable after pulling out the screwdriver. If the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable. The terminal specifications and wiring diagram are shown in the right figure.	①施加0.5~0.7N.m的扭力拧松螺丝 Loosen the screw with a force of 0.5~0.7N.m ②将线缆拔出 Unplug the cable				
			模块端子 (Terminal)	线径范围: AWG (Wire width)	剥线长度: mm (Wire stripping length)	扭力 :N.m (Torsion force)
			2Pin DC24V 电源端子 (2Pin DC24V power supply terminal)	24~12	7~8	0.5 ~0.7
3.7 线缆拆装 2 (Cable connecting and disconnecting II)						
CN	安装线缆时，将一字螺丝刀对准可拆卸端子螺丝，施加 0.5~0.7N.m 的扭力拧松螺丝，将准备好的线缆插入到方孔中，拧紧螺丝，拔出一字螺丝刀，轻拽线缆，线缆不松动即成功完成配线；反之即可取出线缆。端子规格及配线示意图如右图所示。	①施加0.5~0.7N.m的扭力拧松螺丝 Loosen the screw with a force of 0.5~0.7N.m ②将线缆插入方孔中 Insert the cable into the square hole ③拧紧螺丝 Tighten the screw				
EN	During connecting, align the flat-blade screwdriver with the screw and loosen it with a force of 0.5~0.7N.m. Then insert a cable into the square hole, and then tighten the screw with the screwdriver. Gently tug the cable after pulling out the screwdriver. If the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable. The terminal specifications and wiring diagram are shown in the right figure.	①施加0.5~0.7N.m的扭力拧松螺丝 Loosen the screw with a force of 0.5~0.7N.m ②将线缆拔出 Unplug the cable				
			模块端子 (Terminal)	线径范围: AWG (Wire width)	剥线长度: mm (Wire stripping length)	扭力 :N.m (Torsion force)
			3Pin DC24V 电源端子 (3Pin DC24V power supply terminal)	24~12	7~8	0.5 ~0.7
			3Pin RS485 端子 (3Pin RS485 terminal)			
警告：仅使用铜导线。 Warning: Use copper conductors only. Attention: Utilisez uniquement des conducteurs en cuivre.						

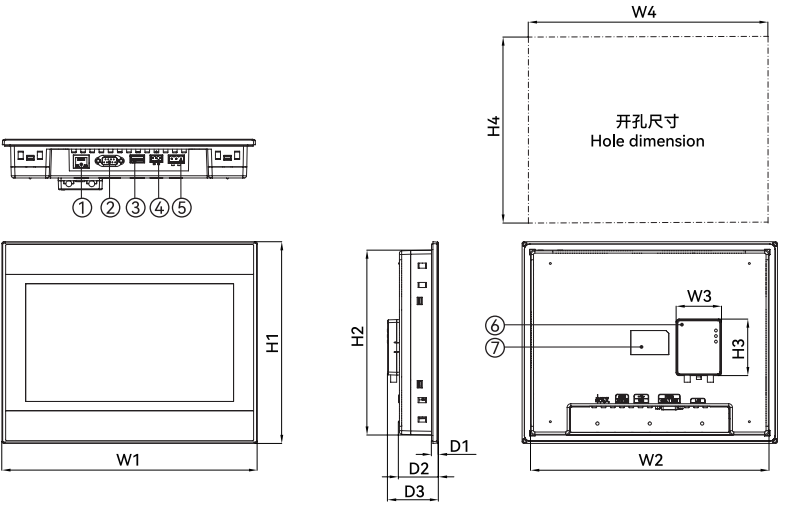
4. 接口和尺寸说明 (Interface and dimension description)

序号(No.)	项目	Item
1	Ethernet接口	Ethernet interface
2	USB-A接口	USB-A interface
3	串口通讯接口 (COM1/2/3)	Serial communication interface (COM1/2/3)
4	DC24V电源端子	DC24V power supply terminal
5	标签	Label



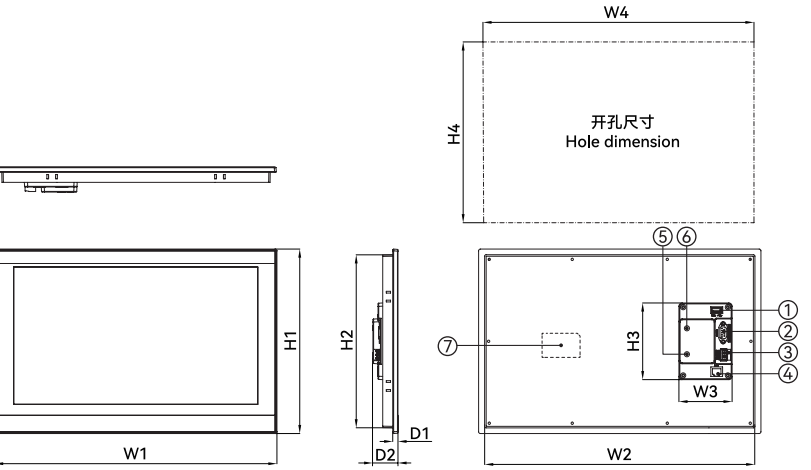
型号 (Model)	外形尺寸 (Dimension) :mm							重量 (Weight) :g
	W1	W2	W3	H1	H2	H3	D1	D2
V304E	128.00	117.90	119.00	102.00	91.90	93.00	6.30	35.20
								285 approx.

序号(No.)	项目	Item
1	Ethernet接口	Ethernet interface
2	串口通讯接口 (COM2/3)	Serial communication interface (COM2/3)
3	USB-A接口	USB-A interface
4	RS485接口 (COM1)	RS485 interface (COM1)
5	DC24V电源端子	DC24V power supply terminal
6	物联网适配器	IoT adapter
7	标签	Label



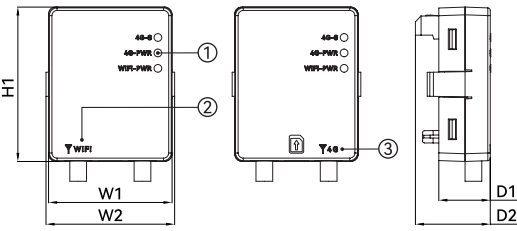
型号 (Model)	外形尺寸 (Dimension) :mm											重量 (Weight) :g
	W1	W2	W3	W4	H1	H2	H3	H4	D1	D2	D3	
V307S	210.00	191.80	49.05	193.00	156.00	137.80	61.05	139.00	7.53	42.2	55.00	642 approx.
V307E				259.00	218.00	199.80		201.00		43.20		1095 approx.
V310S	276.00	257.80	49.05	193.00	156.00	137.80	61.05	139.00	7.53	42.2	55.00	642 approx.
V310E				259.00	218.00	199.80		201.00		43.20		1095 approx.

序号(No.)	项目	Item
1	Ethernet接口	Ethernet interface
2	串口通讯接口 (COM1/2/3)	Serial communication interface (COM1/2/3)
3	DC24V电源端子	DC24V power supply terminal
4	Ethernet接口	Ethernet interface
5	4G接口	4G interface
6	WIFI接口	WIFI interface
7	标签	Label



型号 (Model)	外形尺寸 (Dimension) :mm										重量 (Weight) :g
	W1	W2	W3	W4	H1	H2	H3	H4	D1	D2	
V315E	398.10	380.85	75.00	384.00	260.10	243.85	108.10	247.00	7.40	35.90	2650 approx.
V315E-4G											
V315E-WIFI											

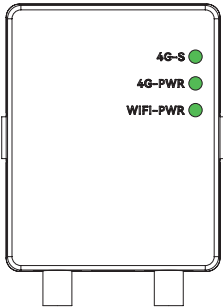
序号(No.)	项目	Item
1	模块状态指示灯	Module status indicator
2	WIFI接口	WIFI interface
3	4G接口	4G interface



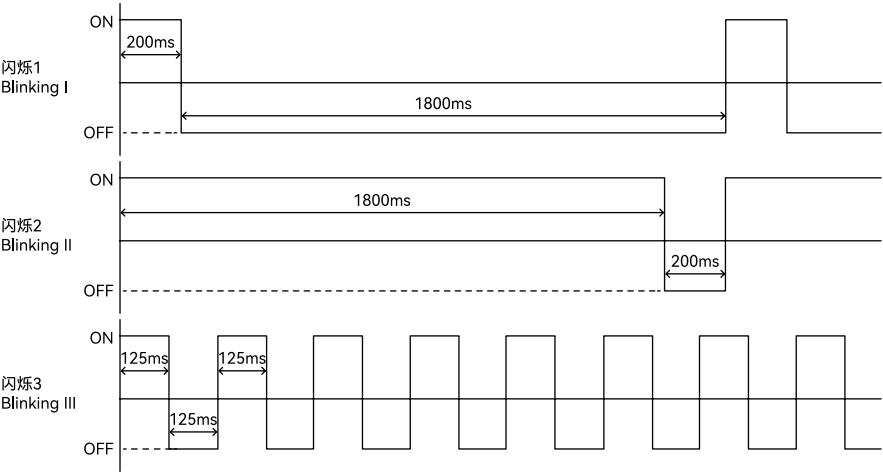
型号 (Model)	外形尺寸 (Dimension) :mm					重量 (Weight) :g
	W1	W2	H1	D1	D2	
V300-4G-ADP	48.00	50.00	60.00	20.00	29.10	40 approx.
V300-WIFI-ADP						

5. 指示灯说明 (Indicator description)

丝印 (Screen printing)	指示灯含义 (Indicator meaning)	颜色 (Color)	状态	Status	说明	Description
V300-4G-ADP / V300-WIFI-ADP						
4G-S*	4G 信号 (4G signal)	绿色 (Green)		熄灭 Not lit	无信号	No signal
				闪烁 1 Blinking I	正在搜网	Finding the internet
				闪烁 2 Blinking II	待机	Stand-by
				闪烁 3 Blinking III	数据正在传输	Sending data
4G-PWR	4G 适配器电源 (4G adapter power)	绿色 (Green)		熄灭 Not lit	未供电	No power supply
				常亮 Lit	供电正常	Normal power supply
WIFI-PWR	WIFI 适配器电源 (WIFI adapter power)	绿色 (Green)		熄灭 Not lit	未供电	No power supply
				常亮 Lit	供电正常	Normal power supply



* 注：指示灯闪烁频率说明。
*Note: Indicator blinking frequency description.



6. 端子及配线说明 (Terminal and wiring description)

型号 (Model)	V304E	V307S	V307E	V310S	V310E	V315E	V315E-4G	V315E-WIFI
串口 (Serial port)	COM1:RS485 COM2:RS485/422 COM3:RS232	COM1:RS485	COM1:RS485 COM2:RS485/422 COM3:RS232	COM1:RS485	COM1:RS485 COM2:RS485/422 COM3:RS232	COM1:RS485 COM2:RS485/422 COM3:RS232	COM1:RS485 COM2:RS485/422 COM3:RS232	COM1:RS485 COM2:RS485/422 COM3:RS232

型号 (Model)	V304E	V307S	V307E	V310S	V310E	V315E	V315E-4G	V315E-WIFI
选配件 (Accessory selection)								
V300-4G-ADP	-	○	○	○	○	-	-	-
V300-WIFI-ADP	-	○	○	○	○	-	-	-
本体4G接口 (Built-in 4G interface)	-	-	-	-	-	-	○	-
本体WIFI接口 (Built-in WIFI interface)	-	-	-	-	-	-	-	○

* 注：○：代表支持该类型；-：代表不支持该类型。
*Note: The symbol "○" indicates that the type is supported. The symbol "-" indicates that the type is not supported.

3Pin DC24V电源端子说明 (3Pin DC24V power supply terminal description)		接线 (Wiring)	2Pin DC24V电源端子说明 (2Pin DC24V power supply terminal description)		接线 (Wiring)
0V			24V		
24V			0V		
FG					

通讯端子说明 (Communication terminal description)						
串口通讯接口 (Serial communication interface)					RS485接口 (RS485 interface) *2	
	Pin	信号 (Signal)				Pin
		RS485 (COM1)*1	RS485 (COM2)	RS422 (COM2)	RS232 (COM3)	
	1		B	Rx-		1
	2				RxD	2
	3				TxD	3
	4			Tx-		
	5	SG	SG	SG	SG	
	6		A	Rx+		
	7	B				
	8	A				
	9			Tx+		

* 注 1: 仅 V304E、V315E、V315E-4G 及 V315E-WIFI 机型支持该接口。
*Note1: This interface is only supported on V304E, V315E, V315E-4G, and V315E-WIFI models.
* 注 2: 仅 V307S、V307E、V310S、V310E 机型支持该接口。
*Note 2: This interface is only supported on V307S, V307E, V310S, and V310E models.

