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HCFA



ATC

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Control



Drive



Sensor



Transmission



Digitalization



# V300 SERIES HMI SELECTION GUIDE

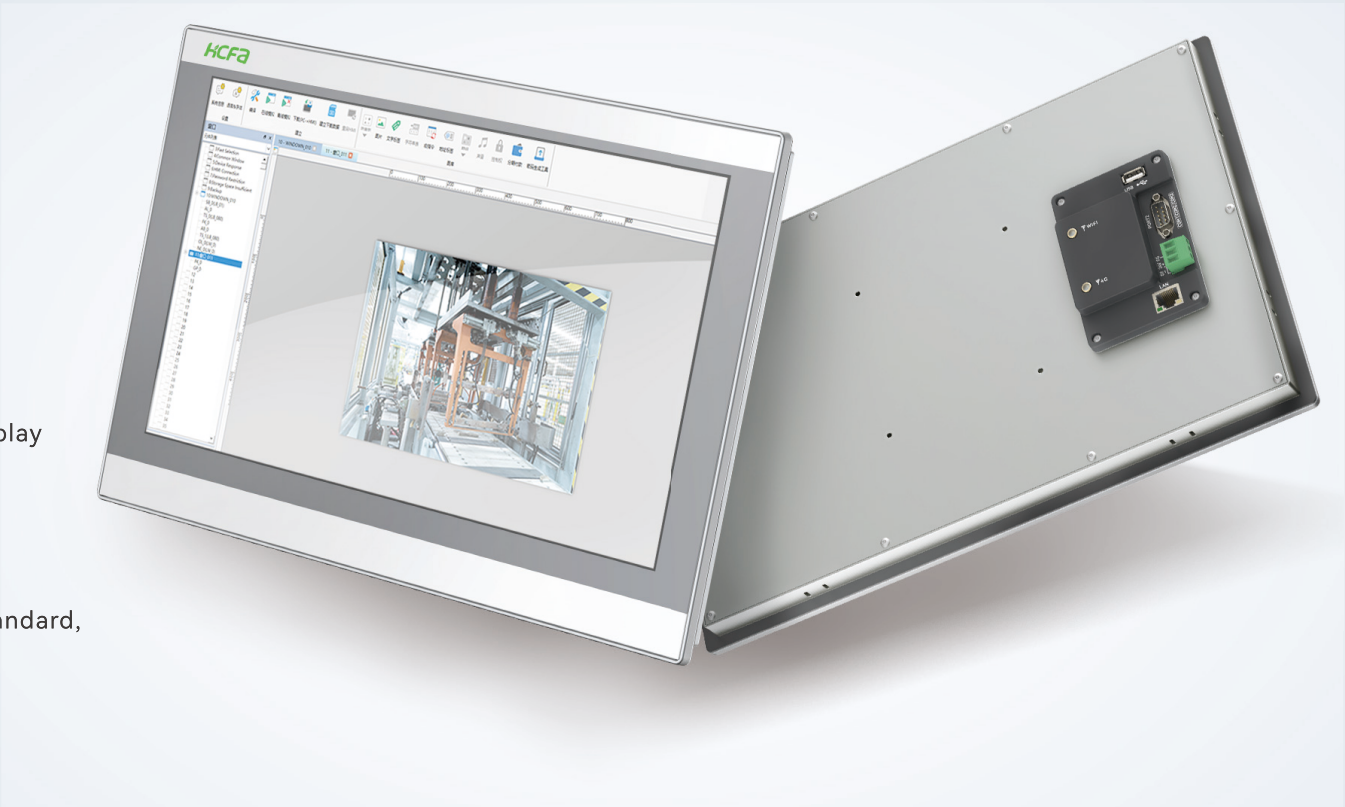
Stable | Safe | Easy-to-use | Efficient



The touch screen with high cost performance and sufficient basic application functions

# V300 SERIES

- ✓ **Exquisite appearance**  
New appearance design and unique style
- ✓ **Safe and reliable**  
Front panel: IP65, the mainboard is coated to effectively resist moisture and dust
- ✓ **Various sizes**  
4.3"/7"/10.1"/15.6" screen available;  
Up to 1920\*1080 resolution, high-definition display
- ✓ **Excellent performance**  
Processor ARM Cortex A7/A53,  
All series are equipped with Ethernet port as standard, with wide applicability



- 4G network**  
China Mobile/China Telecom/China Unicom, more convenient networking
- WIFI**  
Local networking, hotspot networking, low cost, easy to use
- Remote monitoring**  
Program maintenance, monitoring, uploading and downloading
- MQTT**  
Third-party cloud platform data monitoring and maintenance
- HCFA Cloud**  
Cloud data monitoring and maintenance
- Tag communication**  
Communication variable import, data interaction more intuitive, and programming efficiency improved
- Program penetration**  
Local and remote program penetration, faster programming
- Password tools**  
Random password, installment password, use it as you like

6 kinds are available to cover different application scenarios; All series supports Ethernet.

## 4G/WIFI module

V300 can be equipped with 4G and WIFI modules to realize remote operation, penetration, MQTT and other functions.

- Small size and easy to use**  
Small size, easy to install and operate

- Simple design**  
Just insert the IoT card and connect the antenna



## IoT expansion module

Two networking modes : 4G and WIFI; flexible combination of IoT modules; support HCFA cloud platform





# HCFA IoT Ecosystem

HCFA IoT platform can meet the functions of remote monitoring, data collection, remote download/monitoring of automation equipment; Realize remote operation and maintenance of automated equipment, improve work efficiency, and reduce service costs; support multi-platform remote monitoring, such as computers, tablets, mobile phones, etc.



# V300 HMI Configuration Software

HCFA V300 seires's programming software is [HC Touch Vpro]; simple programming style, rich and diverse functions, traditional application methods, saving development time for engineers.

## Features

**Online/offline simulation**

The software supports simulation operation, and the operation results of the HMI project can be known without a physical touch screen;

**Multiple languages**

The software supports 6 languages, namely Chinese, Traditional Chinese, English, Russian, Spanish, and Turkish;

**Common functions**

Supports macro application, recipes, alarms, image import, data export, online simulation, offline simulation, password tools, program penetration, remote monitoring, operation records, etc.

**MQTT Protocol**

The touch screen uses the MQTT protocol publish/subscribe function to achieve remote data interaction with the specified server;

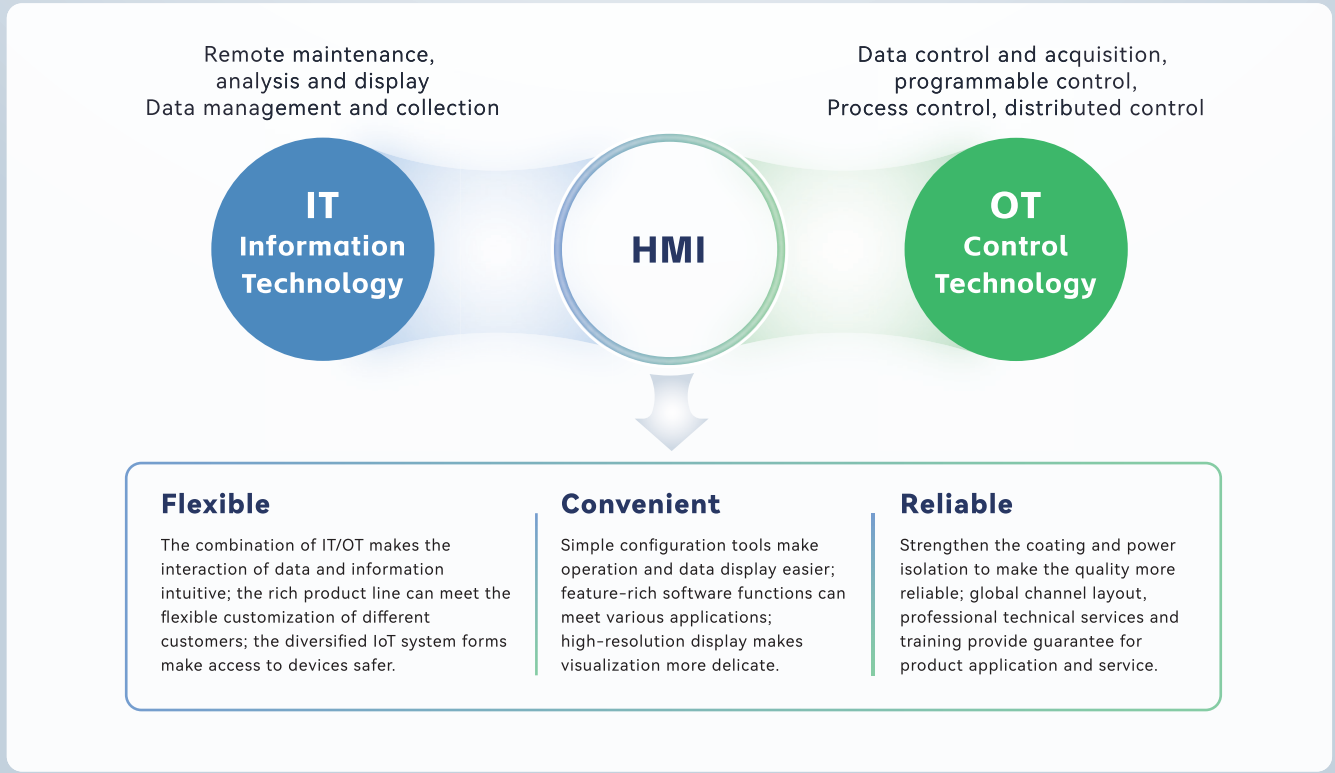
**Communication drive**

100+ communication drives, which can communicate with HCFA PLC and mainstream PLC in the market, as well as temperature controllers, barcode scanners , printers, servos, inverters and other devices;

**Installment payment**

No need for macro programming, convenient and flexible; including static staging, static cycle, running time and dynamic key, password tool and other functions.

## Information





Use the same configuration software HC Touch VPro

# VT-HDX remote operation and maintenance large screen configuration HMI

- ✓ **Processor**  
Quad-core A53 processor; main frequency 1.5GHZ;  
8G cache/1G memory
- ✓ **Size optimization**  
Small size,  
Easy to install in control cabinet
- ✓ **HDMI**  
High-definition picture quality ;  
free matching of screens
- ✓ **Remote monitoring**  
Remote monitoring APP;  
Support monitoring on mobile phones, tablets, etc.



- 3 network ports**  
WAN\*1 / LAN\*2.
- 4G network**  
China Mobile/China  
Telecom/China Unicom
- Edge computing**  
Data collection/data analysis  
Logic processing/linkage control
- USB**  
2-ch USB2.0
- WIFI communication**  
Data transfer/unlimited configuration
- Serial port**  
1-ch RS232 / 2-ch RS485
- HDMI**  
1080P ultra-high definition picture
- SD card**  
Can increase storage capacity

Supports HDMI interface and Not limited by the size of conventional touch screens.



## Three major advantages

**Online maintenance**

Support online monitoring of HMI and its slave station data, convenient for customers to maintain equipment

**Remote debugging**







Support remote upload /download of HMI and controller programs to achieve remote debugging;

**Remote monitoring/operation**

Supports loading HMI screens using PC, tablet, and mobile phone applications, and remotely operates HMI through applications.

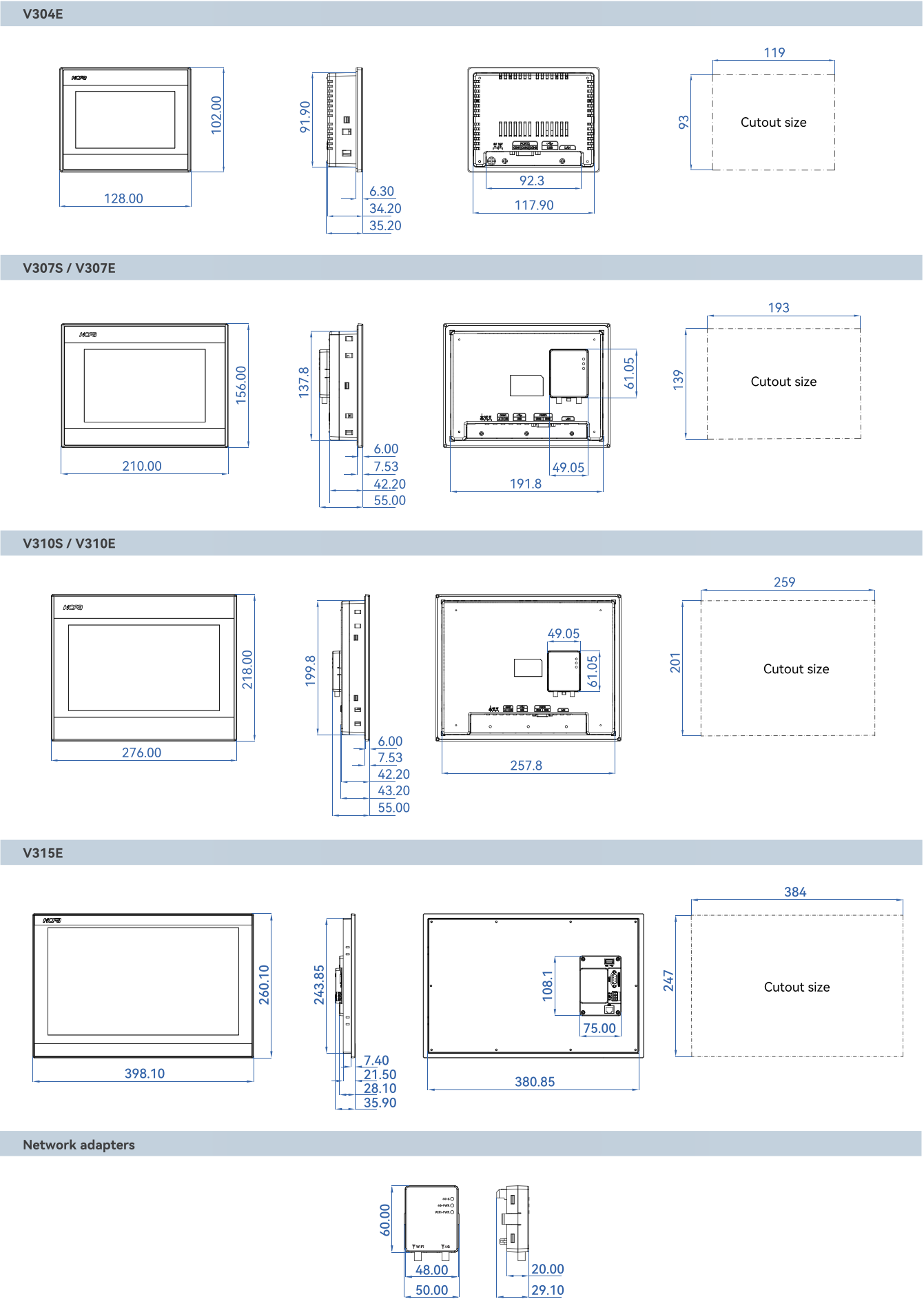


Product Specifications (V300)

Models		V304E	V307S	V307E	V310S	V310E	V315E
Appearance							
Display size		4.3''	7''	7''	10.1''	10.1''	15.6''
Display	Viewing angle (T/B/L/R)	85/85/85/85	60/70/70/70	60/70/70/70	60/70/70/70	60/70/70/70	85/85/85/85
	Resolution	480*272	800*480	800*480	1024*600	1024*600	1920*1080
	Brightness(cd/m²)	350	400	400	400	400	300
	Contrast	400:1	400:1	400:1	400:1	400:1	400:1
	Backlight life (hours)	30000	50000	50000	50000	50000	50000
	Color	16.7M	16.7M	16.7M	16.7M	16.7M	16.7M
Touch screen		4-wire industrial resistive touch screen					
Processor	CPU	ARM Cortex-A7 Dual core1.2Ghz					ARM Cortex-A53 Quad core1.5Ghz
	FLASH/RAM	128M+128M					8G+1G
I/O port	Ethernet port	10M/100M adaptive network port*1					
	USB HOST	USB 2.0*1					
	Serial Interface	COM1:RS485 COM2:RS422/485 COM3:RS232	COM1:RS485	COM1:RS485 COM2:RS422/485 COM3:RS232	COM1:RS485	COM1:RS485 COM2:RS422/485 COM3:RS232	COM1:RS485 COM2:RS422/485 COM3:RS232
	RTC	Supported					
	Buzzer	Supported					
IoT	WIFI/4G	Not supported	Optional				
Electrical specifications	Rated power	2.4W	4.8W	4.8W	7.2W	7.2W	14.4W
	Rated voltage	DC24V (~15% ~ 20%)					
	Power protection	With lightning surge protection					
	Power failure allowed	< 5ms					
	CE	Comply with EN61000-6-2:2005, EN61000-6-4:2007 standards					
	RoHS	Comply with RoHS Lightning surge ±500V, group pulse ±2KV; electrostatic contact 4KV, air discharge 8KV					
	Protection level	Front panel IP65, rear shell IP20; in compliance with national standard GB/T 4208					
	Vibration resistance	5 ~ 150Hz (X/Y/Z directions, 1g/3.5mm displacement)					
	Ambient temperature	0 ~ 55℃					
	Storage temperature	-25 ~ 70℃(no condensation)					
	Relative temperature	10% ~ 95%(no condensation)					
Certification	CE	√					
	ATEX	X					
	UL	X					
Specifications	Mechanical structure	Engineering plastics					Front panel: PET engineering plastic Back panel: Metal
	Installation	Panel embedded installation					Panel embedded and VESA installation
	Cutout size	119.00*93.00	193.00*139.00	193.00*139.00	259.00*201.00	259.00*201.00	384.00*247.00
	Model size	128.00*102.00*35.20	210.00*156.00*42.20	210.00*156.00*42.20	276.00*218.00*43.20	276.00*218.00*43.20	398.10*260.10*35.90
	Weight	285	642	642	1095	1095	2650
Software		HC Touch VPro					
Download method		Network port/USB					

Product Dimensions (V300)



Unit: mm



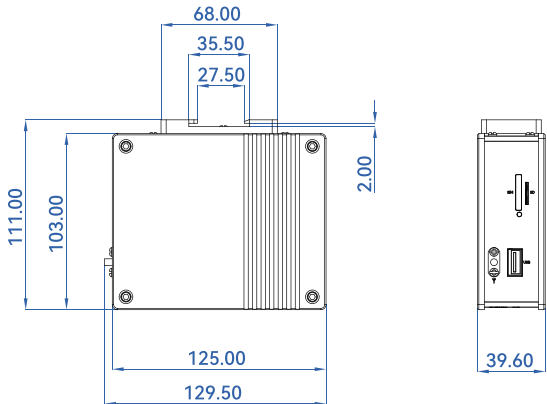


Product Specifications/Dimensions (VT-HDX)

Unit: mm

Models		VT-HDX-WIFI	VT-HDX-4G
Appearance			
Processor	CPU	ARM Cortex-A53 Quad-core1.5GHz	
Memory	RAM	1G	
	RAM FLASH	8G	
	SD card	Supported	
Network port	WAN port	*1	
	LAN port	*2	
Communication interface	WIFI	Supported	None
	4G	None	Supported
	RS232	*1	
	RS485	*2	
	USB	*2	
Display	HDMI	Supported	
Power supply	Input power	9-36VDC	
	Power consumption	380mA@24VDC	
	Power Isolation	None	
	Withstand voltage	500VAC (1 minute)	
	Insulation resistance	More than 50MΩ@500VDC	
Specifications	External dimensions	39.6*129.5*111mm	
	Mounting method	Guide rail	
	Housing material	Metal housing, black	
	Mechanical vibration	10 to 25 Hz (2G 30 minutes at X, Y, Z axis)	
Environment	Operating temperature	0-50℃ (32°-122°F)	
	Operating humidity	10%-90%(no condensation)	
	Storage temperature	10-60℃ (-2°--144°F)	
Certification	CE	√	
Software	PCPC Software	HC Touch Vpro	
	Remote operation and maintenance	Supported	
	Serial port protocol	Supported	
	Network protocol	Supported	
	HDMI display	Supported	
	Edge computing	Supported	
	Screen configuration	Supported	

VT-HDX-WIFI / VT-HDX-4G



Selection Guide

V300 series HMI

Models	Specifications
V304E	4.3'' standard version, supports Ethernet, 3-ch serial communication, does not support 4G/WIFI function
V307S	7'' basic version, supports Ethernet, 1-ch serial port communication, supports WIFI/4G expansion
V307E	7'' standard version, supports Ethernet, 3-ch serial communication, supports WIFI/4G expansion
V310S	10.1'' basic version, supports Ethernet, 1-ch serial port communication, supports WIFI/4G expansion
V310E	10.1'' standard version, supports Ethernet, 3-ch serial communication, supports WIFI/4G expansion
V315E	15.6'' standard version, supports Ethernet, 3-ch serial communication, does not support 4G/WIFI function
V315E-4G	15.6'' 4G version, supports Ethernet, 3-ch serial communication, and come with 4G communication function
V315E-WIFI	15.6'' WIFI version, supports Ethernet, 3-ch serial communication, and come with WIFI communication function

V300 series remote operation and maintenance large screen configuration HMI

Models	Specifications
V300-4G-ADP	V300 series 4G expansion module, only for 7'' and 10'' HMI
V300-WIFI-ADP	V300 series WIFI expansion module, only for 7'' and 10'' HMI

V300 series expansion module

Models	Specifications
VT-HDX-4G	HDMI display, 3 network ports, 3 serial ports, support 4G/WAN networking
VT-HDX-WIFI	HDMI display, 3 network ports, 3 serial ports, support WIFI/WAN networking