

# V300 SERIES HMI SELECTION GUIDE

Stable | Safe | Easy-to-use | Efficient

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## Zhejiang Hechuan Technology Co.,Ltd.

Headquarters: No. 5, Qinshan Road, Longyou Industrial Park, Quzhou City, Zhejiang Province Hangzhou R & D Center: No. 299 Lixin Road, Qingshanhu Street, Hangzhou City, Zhejiang Province



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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



## 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



### 4G network

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China Mobile/China Telecom/China Unicom, more convenient networking

### **Remote monitoring**

Program maintenance, monitoring, uploading and downloading



### WIFI

Local networking, hotspot networking, low cost, easy to use



Third-party cloud platform data monitoring and maintenance

## **HCFA Cloud**

Cloud data monitoring and maintenance



### **Program penetration**

Local and remote program penetration, faster programming



### **Tag communication**

Communication variable import, data interaction more intuitive, and programming efficiency improved



Random password, installment password, use it as you like

# 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.



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

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

Data control and acquisition, programmable control. Process control, distributed control



Simple configuration tools make operation and data display easier; feature-rich software functions can

### Reliable

Strengthen the coating and power isolation to make the quality more reliable; global channel layout, professional technical services and training provide guarantee for product application and service.

# 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** $\square$

Remote monitoring APP; Support monitoring on mobile phones, tablets, etc.







4G network

China Mobile/China Telecom/China Unicom



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### Edge computing

Data collection/data analysis Logic processing/linkage control

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ISB 2-ch USB2.0

## 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;





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

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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
Ар	ppearance						
Di	splay size	4.3''	7"	7''	10.1''	10.1''	15.6"
	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
Display	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
Τοι	uch 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
	Ethernet port			10M/100M adapti	ve network port*1		
	USB HOST			USB	2.0*1		
I/O port	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			Supp	orted		
loT	WIFI/4G	Not supported			Optional		
	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					
Electrical specifications	Power failure allowed	< 5ms					
	CE	Comply with EN61000-6-2:2005, EN61000-6-4:2007 standards					
RoHS Comply with RoHS Lightning surge ±500 electrostatic contact 4KV, air di							
	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°C(no condensation)					
	Relative temperature	10% ~ 95%(no condensation)					
CE √							
Certification	ATEX	X					
	UL	X					
	Mechanical structure	Engineering plastics Front panel: PET engineering plastic Back panel: Metal					
	Installation			Panel embedded	installation		Panel embedded and VESA installation
Specifications	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
	oftware			HC Tou	ch VPro		
S							

# Product Dimensions (V300)











Network adapters





# Product Specifications/Dimensions (VT-HDX)

Unit: mm

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

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





# Selection Guide

### V300 series HMI

4.3" standard version, supports Ethernet, 3-ch serial cor
7" basic version, supports Ethernet, 1-ch serial port com
7" standard version, supports Ethernet, 3-ch serial com
10.1" basic version, supports Ethernet, 1-ch serial port of
10.1" standard version, supports Ethernet, 3-ch serial co
15.6'' standard version, supports Ethernet, 3-ch serial co
15.6'' 4G version, supports Ethernet, 3-ch serial commun
15.6'' WIFI version, supports Ethernet, 3-ch serial comm

### 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	

Specifications
nmunication, does not support 4G/WIFI function
nmunication, supports WIFI/4G expansion
nunication, supports WIFI/4G expansion
communication, supports WIFI/4G expansion
ommunication, supports WIFI/4G expansion
ommunication, does not support 4G/WIFI function
nication, and come with 4G communication function
unication, and come with WIFI communication function