

VI-Q Series HMI Product Manual



VI-Q Series General-Purpose HMI

The VI-Q Series HMI is a new generation of HMI independently developed by INVT. Built on an all-new software architecture, it delivers smooth operation with enhanced security and reliability. Featuring a wide range of communication interfaces, the VI-Q Series HMI is a powerful, highly cost-effective HMI.

By integrating the company's product portfolio including PLCs, frequency converters, servo systems and IoT solutions, we deliver one-stop automation solutions, create tangible value for customers, and strive to be their most reliable partner.



All-New Design

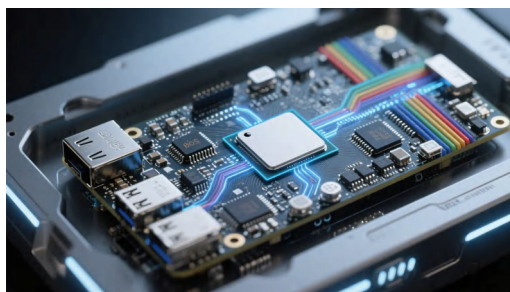
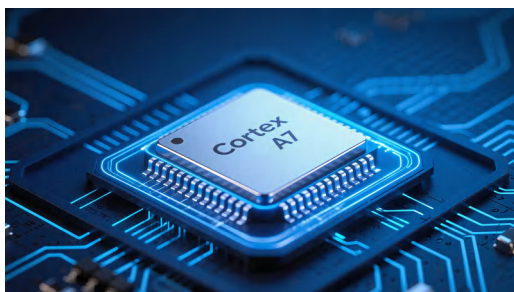
- Light gray body, minimalist and modern
- 24-bit color precision reproduction, vivid and brilliant
- Covering 4.3/7/10.2/15.6-inch screens



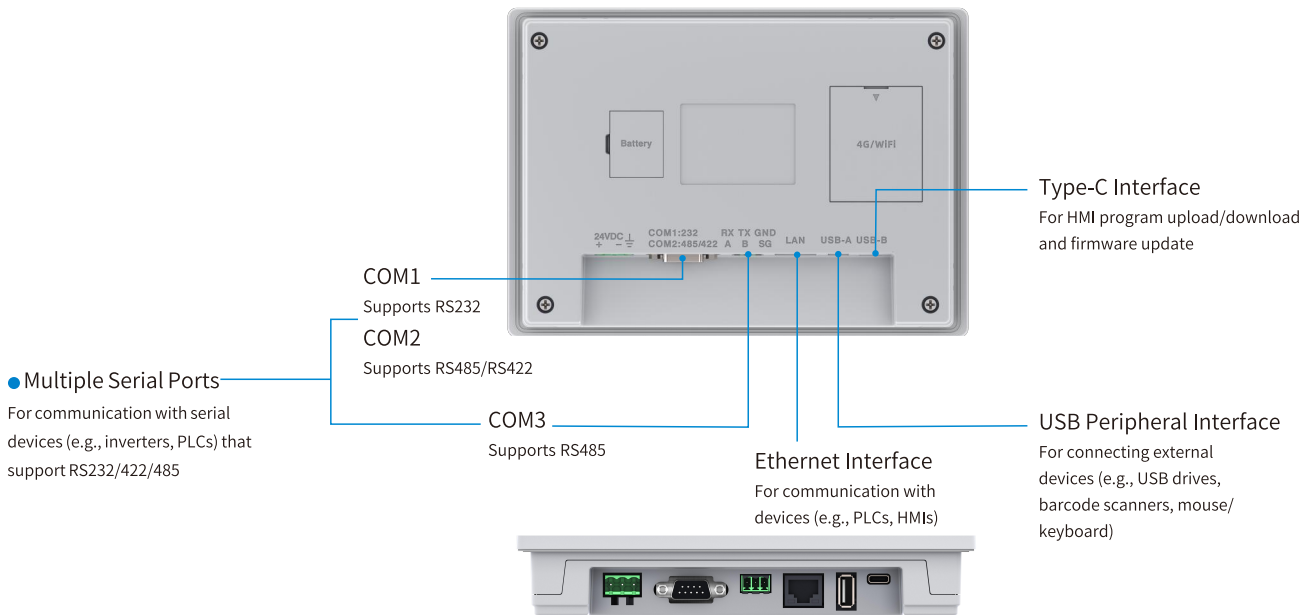
*The 15.6-inch model is expected to be launched in Q4 2026.

High Performance

- Standard equipped with dual-core Cortex-A7 CPU, balancing performance and power consumption.
- ARM architecture paired with Linux system, delivering smooth and efficient performance.



Rich Interfaces



Smart Connectivity

- Integrates with INVT Cloud Platform, supporting full integration of mobile/desktop/web terminals.
- Expandable with WIFI IoT modules, allowing flexible selection based on the on-site environment.

Remote Download: Supports remote upload/download of HMI programs and HMI firmware updates

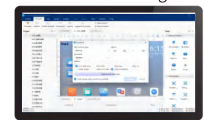
VPN Tunneling: Supports remote upload/download of PLC programs connected to HMI, firmware updates, and PLC monitoring

VNC Desktop: Supports VNC function, enabling real-time HMI monitoring on mobile phones and computers

More IoT Functions: Smart Display, SMS Alarm Notifications, Web Data Logging, Device Interconnection...



VNC Desktop: Real-time on-site HMI monitoring



Remote Download: HMI/connected PLC programs and firmware upgrades

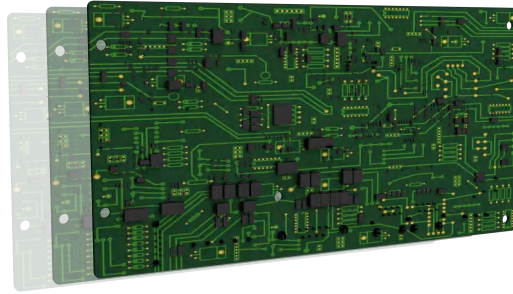


Cloud Configuration: Cooperate with dashboards for multi-device monitoring



Safe and Reliable

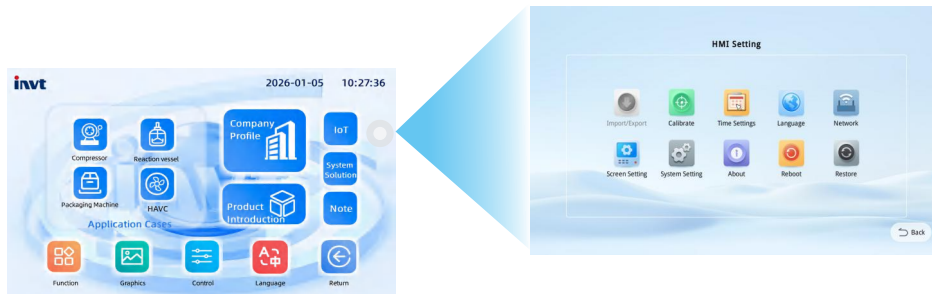
- Front panel complies with IP65
- PCB boards coated with UV adhesive for protection, effectively adapts to harsh environments



Featured Functions

HMI Desktop Widget

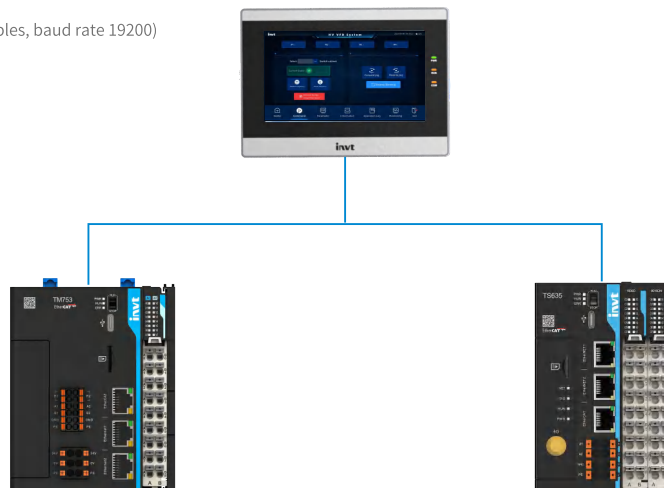
Directly open background settings on HMI to view IP address, set time, switch languages, etc.



INVT PLCs Fast Protocol

Exclusive communication protocol for INVT TS/TM series PLCs; Discrete Variable Communication Speed Increased by 100% Compared to VS Series

(Note: Test condition: 300 discrete variables, baud rate 19200)



AI Function

Intelligent AI alarm, AI script writing, predictive maintenance, etc. (Coming soon)

New Software

- INVT's new HMI configuration software, INVT Touch Station, is user-friendly and significantly reduces programming time for users.



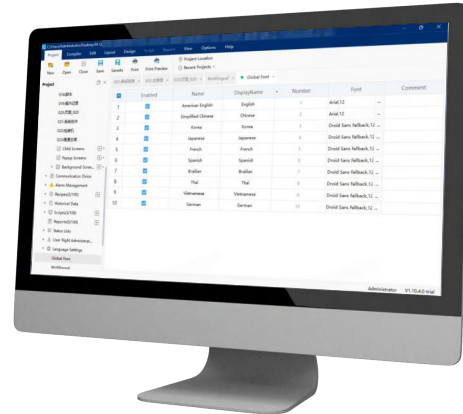
Offline Simulation/Online Simulation

Supports HMI simulation functionality and enables joint online simulation with TS/TM series PLCs.



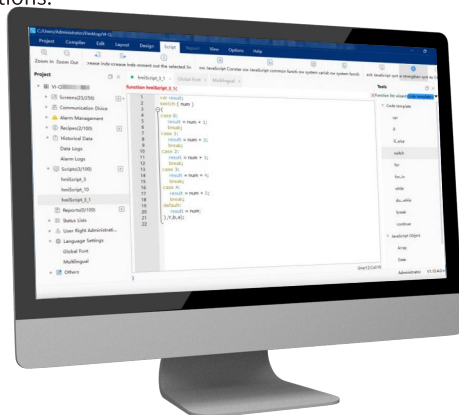
Multi-language

Supports over 100 languages, enabling barrier-free global use.



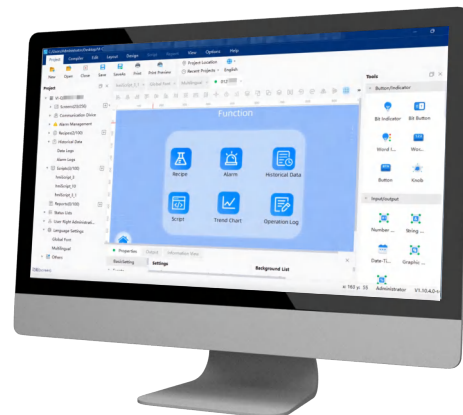
Script Function

The software supports JavaScript script functions, which can be called via controls for higher flexibility and more operations.



Common Functions

Supports common functions including recipes, data logging, operation logging, alarm logging, user rights management, and icon libraries.



Technical Specifications

Model	VI043QE	VI043QS	VI070QC	VI070QE	VI070QS	VI070QS-G	VI102QS	VI102QS-G	VI156QS-G
Display									
Display size	4.3"	4.3"	7"	7"	7"	7"	10.2"	10.2"	15.6"
Resolution	480×272	480×272	1024×600	1024×600	1024×600	1024×600	1024×600	1024×600	1920×1080
Screen material	ITO								
Color depth	24bit								
Brightness	400cd/㎡		450cd/㎡				300cd/㎡		
Backlight type	LED								
Backlight life	20000 hr								15000 hr
Touch panel type	4-wire high accuracy touch panel								
CPU and memory									
CPU	Cortex-A7 1GHz (dual core)								Cortex-A7 1.2GHz
memory	128MB DDR3								256MB DDR3
Flash	128MB FLASH		256MB FLASH				4G EMMC		
Communication interface									
USB	USB Host×1,USB Client×1								
Serial interface	COM1:RS232 COM2:RS485/422	COM1:RS485 (2PIN)	COM3:RS485 (2PIN)	COM1:RS232, COM2:RS485/422, COM3:RS485 (3PIN)	COM1:RS232, COM2:RS485/422, COM3:RS485 (3PIN)	COM1:RS232, COM2:RS485/422, COM3:RS485 (3PIN)	COM1:RS232, COM2:RS485/422, COM3:RS485	COM1:RS232, COM2:RS485/422, COM3:RS485	COM1:RS232, COM2:RS485/422, COM3:RS485
Ethernet	-	Support	-	-	Support	Support	Support	Support	Support
WiFi Extension	-	-	-	-	-	Support	-	Support	Support
SD card slot	-								
Power supply									
Rated voltage	12-24VDC(±15%)								
Rated power	3W	3W	4W	4W	4W	4W	7W	7W	10W
Environment									
Work temperature	0~55°C								
Work humidity	5-95%RH(No condensation)								
Protection level	IP65 (front panel)								
Certification									
CE	EN55032,EN55035								
FCC compatibility	FCC,Class A								
RoHS	●								
Dimensions and weight									
Physical dimension (mm)	139×86×31	139×86×31	203×145×35	203×145×35	203×145×35	203×145×35	273×211×40	273×211×40	395×257×31
Hole dimension AB (mm)	132×80	132×80	192×138	192×138	192×138	192×138	259×201	259×201	383×246
Weight (g)	214	214	700	700	700	700	1050	1050	2450
configuration									
Configuration software	INVT Touch Station								

Note: ●Indicates Support - indicates not supported

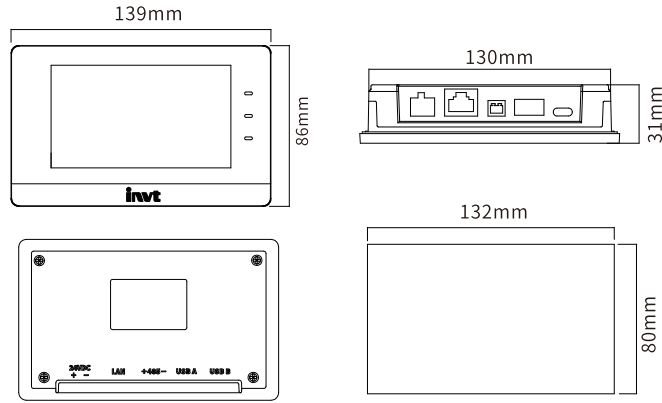
VI070QS-G, VI102QS-G and VI156QS-G are scheduled to be launched in Q4 2026.

Ordering Information

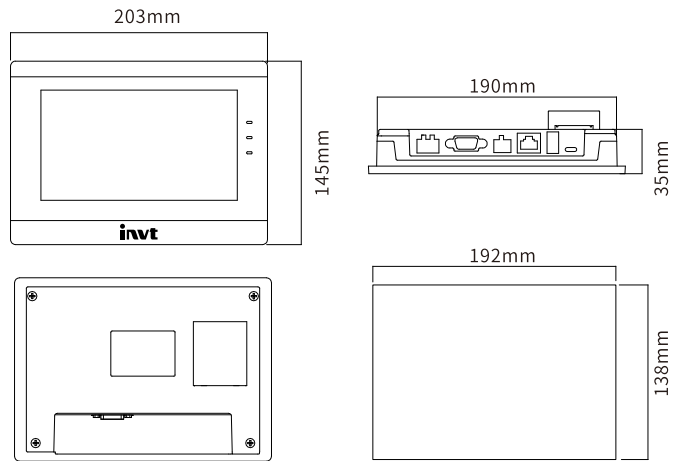
Ordering Code	Model	Description	Mounting Hole Dimensions
11026-00046	VI043QE	4.3-inch,480×272 resolution,24-bit color,2 serial ports;RoHS	132×80mm
11026-00044	VI043QS	4.3-inch,480×272 resolution,24-bit color,1 serial port,1 Ethernet port;RoHS	132×80mm
11026-00045	VI070QC	7-inch,1024×600 resolution,24-bit color,1 serial port;RoHS	192 x 138mm
11026-00043	VI070QE	7-inch,1024×600 resolution,24-bit color,3 serial ports;RoHS	192×138mm
11026-00038	VI070QS	7-inch,1024×600 resolution,24-bit color,3 serial ports,1 Ethernet port;RoHS	192 x 138mm
11026-00037	VI102QS	10.2-inch,1024×600 resolution,24-bit color,3 serial ports,1 Ethernet port;RoHS	259 x201mm

Dimension

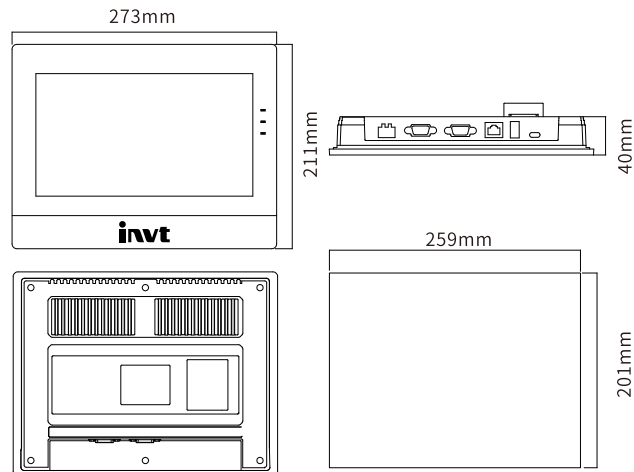
VI043QE/VI043QS



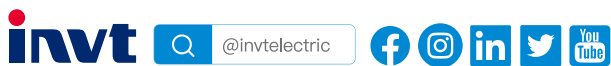
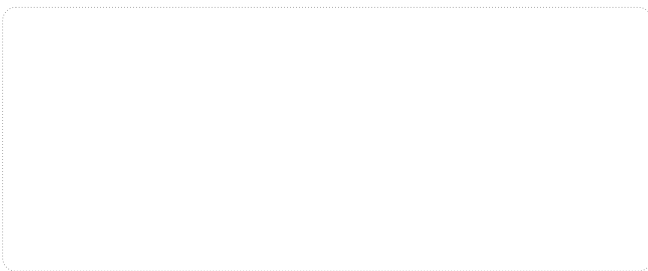
VI070QC/VI070QE/VI070QS



VI102QS



Leading Smart Industry, Shaping Net-Zero Future



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Industrial Automation:

- HMI
- PLC
- VFD
- Servo System
- Elevator Intelligent Control System
- Rail Transit Traction System

Electric Power:

- UPS
- DCIM
- Solar Inverter
- New Energy Vehicle Powertrain System
- New Energy Vehicle Charging System
- New Energy Vehicle Motor

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66003-00461 202606(V2.0)