

Field Control Layer Device



BACnet Operator Touch Display panel (MSTP)

【Description】

NVT28U graphic touch screen is a BACnet B-OD level operator display panel with temperature (humidity optional) sensors. It uses a 32 bit microprocessor and Communicates up to 76,800bps and can be mounted up to 1,200M away. Any graphic software can be used for generating the back ground graphics then use AIRTEK HMI software to assign points and animated graphics, then down load to the screen using a micro USB cable. The user can read/write data on any device on the network. A single screen can control multiple devices or Multiple screens can control a single device on the network. It can be used as a commissioning tool.



【Features】

- BACnet B-OD panel conforms ASHRAE BACnet MS/TP standard.
- 2.8" screen, 65,535 colors, touch screen TFT LCD, 320*240 pixel, set up with HMI software.
- English, UTF-8 fonts, can be displayed on the screen graphics.
- Four + I + II + III function keys, is system setup key. I, II, and III can be used as short cuts to specific graphic pages.
- Update firmware and upload graphic pages by using a Micro USB cable.
- 8M Bytes fonts and graphic memory. It can hold up to 25 graphic pages (Actual pages depend on data size).
- The panel can read/write properties of a BACnet device on the network. The properties can be logic, value, list, string, object, time, date, or listing status of a bit string.
- Display incoming alarm notification messages from any device on the network. Most recent 80 messages will be stored in the message history.
- 10 password levels, user can setup up to 20 passwords.
- Includes a BACnet MS/TP network communication monitoring function.
- Time synchronizes function. Selectable to broadcast on the BACnet network.

【Specification】

Model	Sensor	Range	Temp. Accuracy	Humid. Accuracy	Measure Environment
NVT28U	10K ohm NTC	0-50 °C	±0.25□	(NA)	25□
NVT28U-H	CMOS chip	0-50 °C/0-100% RH	±0.4□	±3%RH	20~80%RH

Power Supply : 5VDC, 2VA (Controller internal 5VDC power can be used (MSnet V+ & V-).

LCD Display : 2.8", 65,535 colors, touch screen TFT LCD, 320*240 pixels.

Microprocessor : 32 bit processor, 64K RAM, 384K Flash memory, 8M memory for fonts etc.

MS/TP Net : MS/TP RS-485 network, 9,600 to 76,800bps auto detect, Max. 1200M.

USB Port : A micro USB port for upload firmware and information.

Clock : A gold capacitor to run clock for 48 hours after power Failure.

Keys : Four function keys + I + II + III. (Is the system setting key) I, II, and III are short cut keys.

Buzzer : One buzzer

Environment : 0~50°C, 20~95%RH non-condense.

Certificate : CE

BTL List : BACnet B-OD

Accessory : HMI-Linker USB Setting cable (Not included)

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[Installation]

- Mounts on standard wall plate or bracket.
- It is a plug/play device.
- Use the AWG22 shield cable and EMT.
- The panel can use the 5VDC power of the V+ and V- on the MSnet port of ta Airtek controller.
- Setup, upload firmware, upload graphic display by using the BACsoft software and connect PC to NVT28U with USB2.0 to Micro USB port (see Fig. 3).
- To install NVT28U on a MS/TP network, user should follow RS- 485 networks general wiring rule, does not be T shape or star shape configuration. Add terminal resistor at both ends of network. If NVT28U is located at the end of a network, the internal terminating resistor can used (see Fig. 3).
- Avoid dust, condensation etc to prevent product damage.

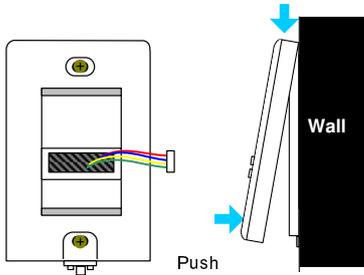


Fig. 1 Installation

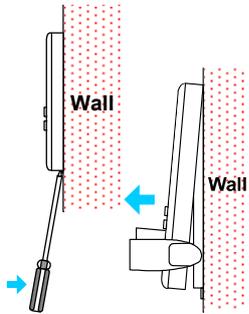


Fig. 2 Open Cover

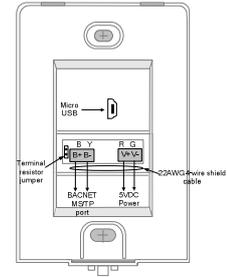
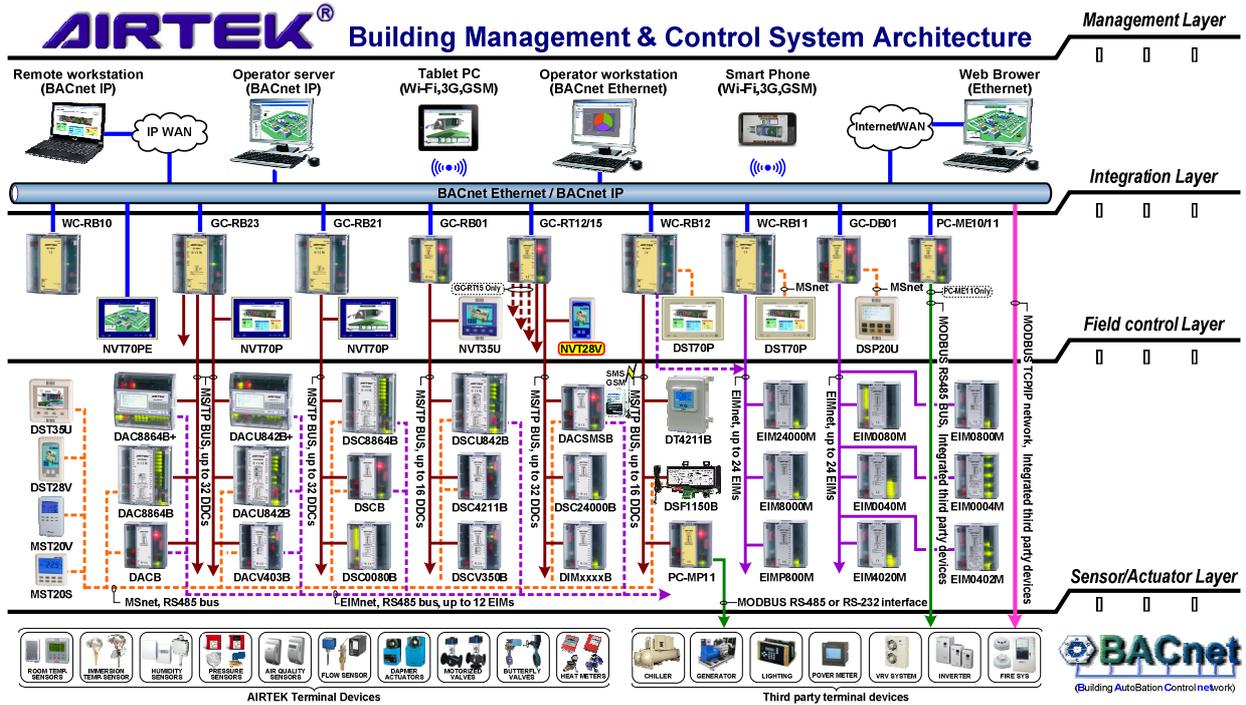


Fig. 3 Wiring

[Network Architecture]



[Dimension] Unit: mm

