

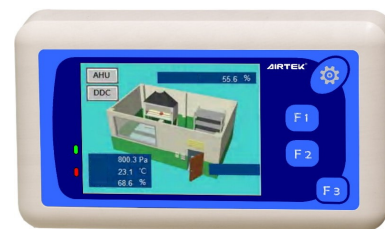
### BACnet Operator Touch Display panel (B-OD)

#### [Description]



**NVT28U** graphic touch screen is a BACnet (B-OD) level operator display panel (BTL Approved) with temperature (NVT28U humidity sensor optional) sensors. It uses a 32 bit microprocessor and MSTP Communication from 9600bps to 76,800bps and can be remotely mounted up to 1,200M away.

The screen back ground image can be made using any graphic software, then use the free AIRTEK HMI software to assign points and animated graphics to the existing image, down load to the screen using a standard micro USB cable and you are finished.

The screen can read/write data on any Bacnet BTL approved device on the MSTP network. A single screen can control multiple devices or Multiple screens can control a single device on the network. It can also be used as a commissioning tool.



#### [Features]

- BTL Approved, 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 (Ai,Av,Ao,Bi,Bv,Bo) on the network. The properties can be logic, value, list, string, object, time, date, or list the 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.

Model	Sensor	Range	Temp. Accuracy	Humid. Accuracy	Measure Environment
NVT28U	10K ohm NTC	32-122 °F(0-50 °C)	±0.45 °F (0.25°C)	(NA)	77 °F (25°C)
NVT28U-H	CMOS chip	32-122 °F/0-100% RH	±0.7 °F (0.4°C)	±3% RH	20-80% RH

**Power Supply** : 5VDC, 2VA



**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 (plug/play device).

**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

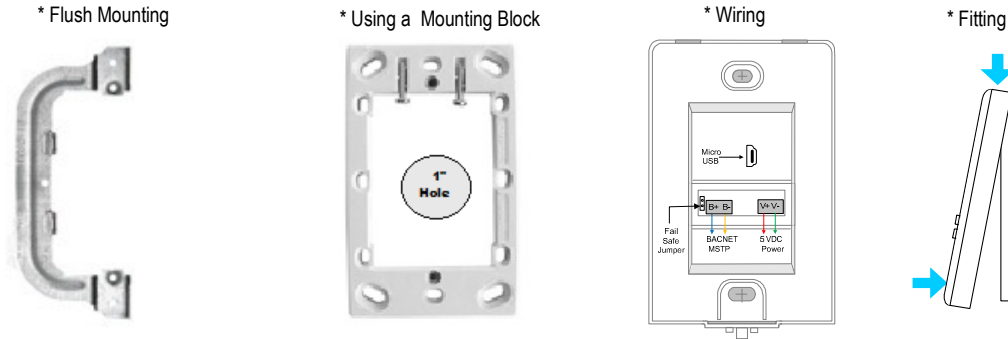
**Environment** : 0~50°C, 20~95%RH non-condensing.

**Certificate** : CE

**BTL List** : BACnet B-OD

## [Installation]

- Mounts on standard wall plate or mounting block.
- Use AWG22 shielded cable.
- Recommend using a separate 5VDC power supply.
- To install NVT28U on a MS/TP network, user should follow RS-485 networks general wiring rule, do not use T shape or star shape configuration. Add terminal resistor at both ends of network.
- Avoid dust, condensation etc to prevent product damage.



## [Network]

