

Field Control Layer Device

NVT70PE

BACnet Operator Touch Display panel

[Description]

NVT70PE is a BTL listed BACnet B-OD level operator display panel. It can connect to on a BACnet Ethernet, BACnet/IP or MS/TP communication network inter connective any brand's BACnet AAC/ASC controllers. It may facilitate the user by graphically to access, examine, setting, change and confirm each kind of control parameter value from B-AAC/B-ASC controller, for example temperature value, humidity value, devices operation status, and alarm messages, enable output points start/stop, changing the temperature and humidity setting values, etc. NVT70PE has a 7 inches TFT LCD touch screen and Simplified / Traditional Chinese / English display subtitles function, build in with a 32-bit high performance microprocessor. User can use BACsoft software or HMIkit to edit their favorite display screen pages, even corporate image or promotion leaflet can be loaded to the screen when in non operation mode, this not only enhance the added value of products but also enhance the effectiveness of corporate image advertising.



[Features]

- BTL listed BACnet Operator Display (B-OD) panel.
- Communication interface can be either BACnet Ethernet or the BACnet/IP or BACnet MS/TP communication protocol.
- BACnet MS/TP interface with 2500Vrms electrical isolated protection.
- Edit display with AIRTEK BACsoft software. 65,536 colors.
- Selectable Simplified Chinese, Traditional Chinese, and English display.
- Update firmware and upload graphic pages by using a Mini USB cable.
- 128M Bytes fonts and graphic memory. It can hold 152 pages of 800*480 pixel .bmp pictures.
- Meter, loading bar, trend pictures support the edit of GUI display.
- The panel can read property of a BACnet device on the network. The reading property can be logic, value, list, string, object, time, date, or list status of a bit string.
- Display incoming alarm notification messages from any device on the network. Save the alarm message. Jump to the alarm assigned display page.
- The panel can modify Calendar ` Schedule of any B-AAC or B-BC device on the BACnet Ethernet network, compliant to SCHED-VM-A (BIBB - Scheduling-View and Modify-A)
- 10 password levels, users can setup up to 20 passwords.
- Time synchronizes function. Selectable to broadcast on the BACnet network.

[Specification]

Model	Port	Ethernet	Protocol	Size	Pixel	Note
NVT70PE	MS/TP	BACnet Ethernet or BACnet/IP	BACnet	7"	800(V)*480(H)	Black case, black aluminum plate

Power Supply : 24VAC, 2VA

LCD Display : 7.0", 262K colors, touch screen TFT LCD, 800*480 pixels.

Microprocessor : 32 bits Microprocessor, 1M SRAM, 128M NAND Flash memory, 128M memory for fonts and user information.

Ethernet Port : 10/100M Ethernet interface, can be either BACnet Ethernet or BACnet IP communication protocol.

MS/TP Port : RS-485 communication interface, built-in anti-interference isolator with rated isolation voltage of 2,500Vrms and maximum working insulation voltage of 560Vpeak. Communication rate 9,600/19,200/38,400/76,800 BPS selectable, transmission distance 1,200 meters. Connect up to 32 MS/TP devices.

(Note: User can choose either Ethernet or MS/TP only. Cannot use both of them at the same time.)

USB Port : The Mini USB interface is dedicated to firmware update and graphic control data download.

Real Time Clock : There is a gold capacitor to run clock when the power is interrupted.

Keys : System function keys are the small dots on the upper right side of the screen; on-screen touch keys F1, F2, F3 are programmable functions.

Buzzer : For operation prompt and alarm prompt.

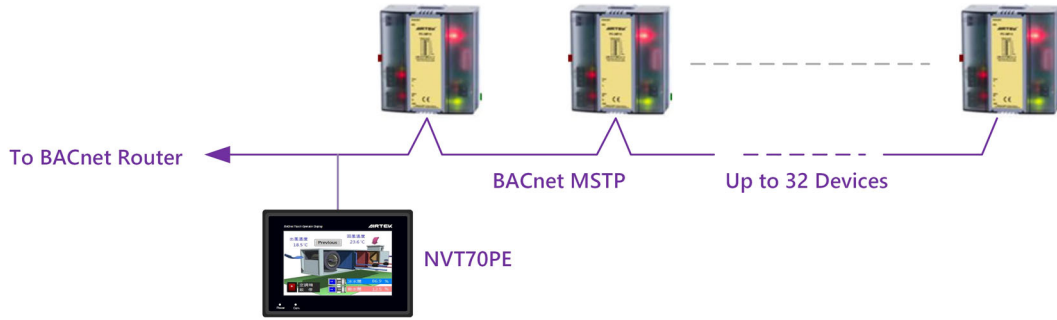
Environment : 0~50°C, 5~95%RH non-condense.

IP Grade : Front cover IP65, NEMA4

Certificate : CE, FCC, BTL (B-OD), RoHS.

Accessory : HMI-LINKER (Mini USB cable). Selectable, not included.

[Network]



[Installation]

- For panel mounted, must cut a hole 197.6±0.5 mm (height) *137.1±0.5 mm (width) for the panel, It should have enough wiring space for power and network.
- Please use Cat 6 (Category 6 cabling) cable for Ethernet communication network.
- When installing according to (Fig.1), first pull up one side of the spring clip and put it into the wall, then pull up the other side and put it into the wall, then the panel will be close to the wall.
- Use the AWG22 #2C shield cable and EMT to obtain good control effect.
- An independent 24VAC power supply is required for this device. This power supply should not share with other devices.
- Setup, upload firmware, and upload graphic display by using the BACsoft software and connect PC to NVT70PE with USB2.0 to Mini USB cable (see Fig. 2).
- To install NVT70PE on an Ethernet network, user should follow RS- 485 networks general wiring rule, does not be T shape or star shape configuration. Add terminal resistor at both sides. If NVT70PE is located at the end of a network, the terminal resistor can be installed on its port.
- Pay attention to avoid dust, condensate environmental element to prevent product damage.
- If you want to download the graphic control screen of the panel, set the parameters or update the firmware version, you need to use the computer to run the BACsoft software to operate. **Note! Please unplug the external 24VAC power supply before connecting to the computer**, and then connect to the computer with a Mini USB cable, and switch to the 5VDC power supply of the computer's USB port, so that the computer and panel information can be transmitted smoothly.

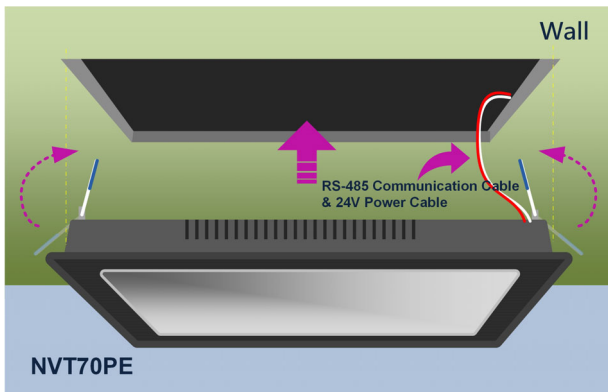


Fig. 1 Recessed Light Installation Schematic

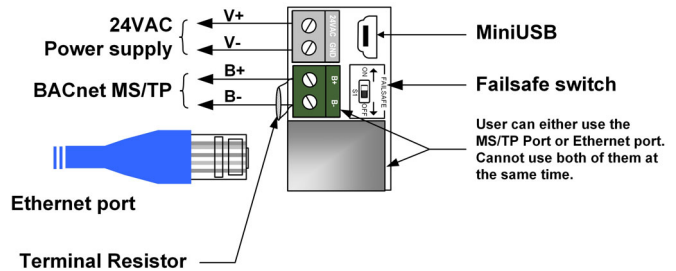


Fig. 2 NVT70PE Wiring

[Dimension] Unit: mm

