# **Field Control Layer Device**

# NVT35U

# **BACnet Operator Touch Display Panel**

## [Description]

NVT35U is a BTL listed BACnet B-OD level operator display panel. It can connect to on a BACnet MS/TP communication network interconnective 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. NVT35U has a 3.5 inches TFT LCD touch screen and Simplified / Traditional Chinese / English display subtitles function, four function keys, build in with a 32-bit high performance microprocessor. User can use BACsoft software or HMlkit 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) control panel.3.5" screen, 65,536 colors, touch screen TFT LCD, 320\*240 pixel, set up with AIRTEK BACsoft software.
- Selectable simplified Chinese, Traditional Chinese, and English, UTF-8 fonts, simplified and traditional Chinese can be displayed on the same screen graphic.
- Four 🗗 + F1 + F2 + F3 function keys, 🌣 is system setup key. F1, F2, and F3 can be set up as function keys for switch display pages.
- Update firmware and upload graphic pages by using a Mini USB cable.
- 6M Bytes fonts and graphic memory. It can hold up to 40 pages display graphic. Actual pages depend on data size.
- 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 listing status of a bit string.
- Display incoming alarm notification messages from any device on the network.
- 10 password levels, users can setup up to 20 passwords.
- Has a BACnet MS/TP network communication quality monitor function.
- Time synchronizes function. Selectable to broadcast on the BACnet network.

# [Specification]

Power Supply : 24VAC/VDC, 1VA (Do not use the 24VDC provided by a DDC. It does not have enough watt.)

LCD Display : 3.5", 65,536 colors, touch screen TFT LCD, 320\*240 pixels.

**Microprocessor**: 32 bit microprocessor, 64K RAM, 384K Flash memory, 8M memory for fonts and user information.

**MS/TP Net** : RS-485 interface, selectable communication speed 9,600/19200/38400/76800 bps, max. length 1.200M.

**USB Port** : A mini USB port for upload firmware and information.

**Real Time Clock** : A gold capacitor to run clock for 48 hours after power interrupted.

**Keys** : Four function keys ♥ + F1 + F2 + F3. ♥ is system setting key. F1, F2, and F3 are the function keys.

**Buzzer** : One buzzer

**Environment** :  $0 \sim 50^{\circ}$ C,  $2.0 \sim 90$ %RH non-condensing.

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

**Accessory** 

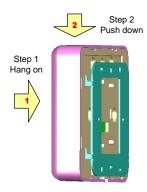
**HMI-LINKER** : Selectable USB setting cable(Mini USB).



# To BACnet Router BACnet MSTP Up to 32 Devices NVT35U

### [Installation]

- For wall mounted, the double gang back box should be selected for enough wiring space.
- Lock the fixed sheet iron by the screw then installs the controller and pushes down to fix it. Uninstall it by reverse process.
- Use the AWG18#2C shield cable and EMT to obtain good control effect. Do not go with a power wire.
- An independent 24VAC/ 24VDC 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 NVT35U with USB2.0 to Mini USB cable (see Fig. 2).
- To install NVT35U 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 side. If NVT35U is located at the end of a network, the terminal resistor can be installed on its port (see Fig. 3).
- Pay attention to avoid dust, condensate environment 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/DC 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.



MiniUSB 22AWG Twistedpair
BACnet MS/TP 24VAC/DC

Tops:

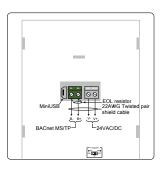
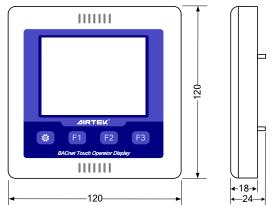


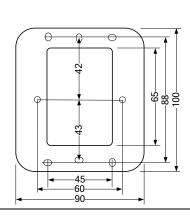
Fig. 1 Installation

Fig. 2 NVT35U Port

Fig. 3 Terminal Resistor

# 【Dimension】 Unit: mm





Please refer to http://www.airtekgroup.com for the most resent update information