

# NEVD SERIES

VAV SMART ACTUATOR HMI LCD ROOM UNIT FOR NSVA



## NEVD SERIES

NEVD series Human Machine Interface, Compact with sensing + Controller + Communication+ LCD Display. It has communication port (MODBUS RTU) provide with RJ11 connector. For direct communicate with smart VAV actuator.

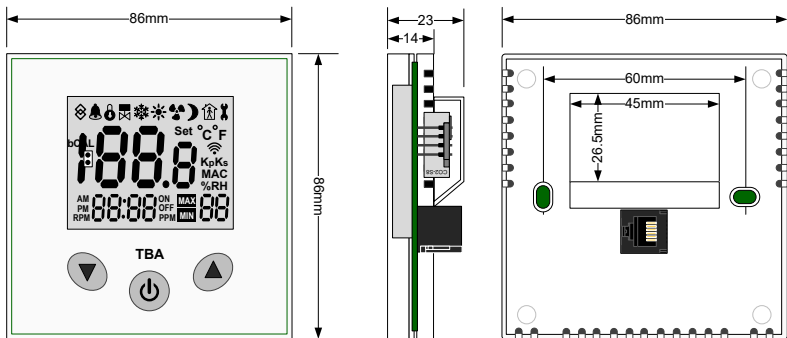
## PRODUCT FEATURE

- 16 bit (MCU) with memory
- Compact with Sensing + Controller + Communication + Display
- MODBUS RTU for Communication
- LCD with backlight, Clear and detailed display of the operating data
- Built in Temperature(T), Humidity(H), Carbon dioxide (CO2), IAQ sensor
- High-precision for IAQ sensor
- Dedicated design for smart VAV actuator
- Compact, quick installation with Pluggable terminal & RJ11 connection

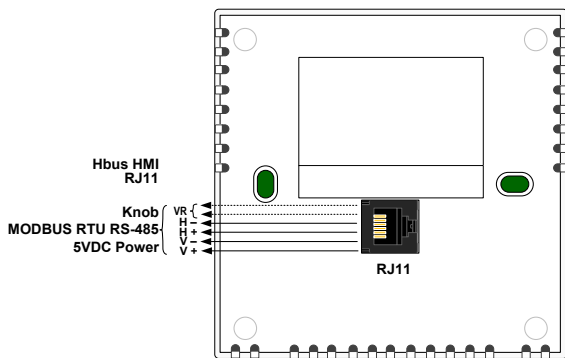
## MODEL SELECTION TABLE

| MODEL    | TEMPERATURE | HUMIDITY | CARBON DIOXIDE | BACKLIGHT |
|----------|-------------|----------|----------------|-----------|
| NEVD     | O           | X        | X              | O         |
| NEVD-H   | O           | O        | X              | O         |
| NEVD-IAQ | O           | O        | O              | O         |

## DIMENSION (mm)



## WIRING



## TECHNICAL SPECIFICATION

|                           |                                                                                                      |
|---------------------------|------------------------------------------------------------------------------------------------------|
| <b>MODEL</b>              | NEVD                                                                                                 |
| <b>MCU</b>                | 16 bit MCU with memory                                                                               |
| <b>DIMENSION</b>          | 90mm(W) 90mm(H) 26mm(D)                                                                              |
| <b>WEIGHT</b>             | NEVD: 138g<br>NEVD-H: 138g<br>NEVD-IAQ: 146g                                                         |
| <b>BUTTON</b>             | ON-OFF switch & UP DOWN setting                                                                      |
| <b>COMMUNICATION</b>      | MODBUS RTU RS-485 loop; Speed > 9600BPS, 100m                                                        |
| <b>OPERATING</b>          | 0°C ~ 50°C, 20 ~ 90%RH, non condensing                                                               |
| <b>POWER SUPPLY</b>       | 5V, 1VA                                                                                              |
| <b>DISPLAY</b>            | 61.5" 39.6mm LCD with backlight                                                                      |
| <b>TEMPERATURE SENSOR</b> | NEVD-H: 10KΩ @ 25°C (NTC) Thermistor, 0°C ~ 50°C, ±0.3°C @25°C<br>NEVD-IAQ: CMOS, 0°C ~ 50°C, ±0.3°C |
| <b>HUMIDITY SENSOR</b>    | CMOS, 0~100%RH, ±3%RH                                                                                |
| <b>CARBON DIOXIDE</b>     | Non-dispersive infrared (NDIR), 400 ~ 2000ppm, ±70ppm + 3% of reading                                |
| <b>CO2</b>                | ABC (Automatic Baseline Correction) & bCAL (background callibration)                                 |
| <b>HOUSING</b>            | ABS + PC, IP20                                                                                       |
| <b>WEIGHT</b>             | NEVT (150g), NEVT-H (150g), NEVT-IAQ (158g)<br>(include base plate and packing)                      |
| <b>CERTIFICATION</b>      | CE (EMC Directive: 2014/30/EU)<br>FCC(PART 15, Subpart B Class A)                                    |

## INSTALLATION

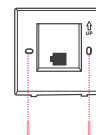
### Step 1: Opening NEVD cover

Use a small flat Tip screwdriver to remove mounting cover from NEVD Room Unit.  
Use the screwdriver to push the bottom of the NEVD Room Unit and lift up the ledge away from the cover.  
Repeat for the other side of the cover.



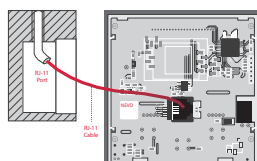
### Step 2:

Mount the mounting cover of NEVD on the wall switch box with 2 screws [1].  
Ensure that the bottom Ventilation opening is not being blocked.



### Step 3:

Connect the RJ11 that is connect to the NSVA Smart actuator to the front of the NEVD RJ 11 port.



### Step 4:

Mount the front of the NEVD back to the mounting cover that is install on the switch box.  
First, install the top of the cover first. Secondly use a small flat tip screwdriver to push the ledge in and push the cover firmly toward the mounting cover. Repeat for the other side cover.

