## **NTS 9800 SERIES SMART IAQ SENSOR**

SMART IAQ SENSOR WITH LCD DISPLAY



#### NTS 960 SERIES

NTS 9800 series Human Machine Interface, Compact with sensing + Communication + LCD Display. It has communication port (MODBUS RTU).

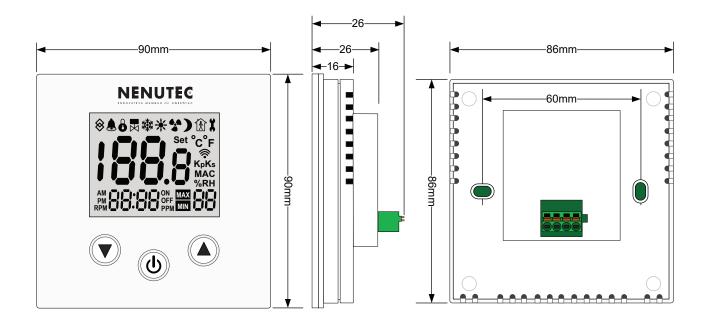
### **PRODUCT FEATURE**

- Compact with Sensing + Communication + LCD Display
- MODBUS RTU for Communication
- Built in Temperature(T), Humidity(H), Carbon dioxide (CO2), IAQ sensor
- High-precision for NTS 9800 sensor
- ASC (Automatic baSeline Correction) for calibration for CO2 sensor.
- BC (Background Calibration) for calibration for CO2 sensor
- Provide parameter, alarm value settings for onsite and remote monitoring and control applications

### **MODEL SELECTION TABLE**

MODEL / TYPE	TEMPERATURE	HUMIDITY	CARBON DIOXIDE	COMMUNICATION	BACKLIGHT	LCD
NTS 9813	Yes	Yes	Yes	MODBUS RTU	Yes	Yes

### **DIMENSION (mm)**



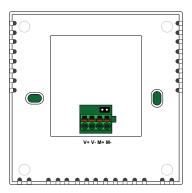
TECHNICAL SPECIFICATIONS				
MODEL NUMBER	NTS 9800			
мси	16 bit CPU (MCU) with memory			
DIMENSION	90mm(W)*90mm(H)*26mm(D)			
WEIGHT				
• NTS 9813	146 g			
BUTTON	ON-OFF switch & UP Down setting			
COMMUNICATION	MODBUS RTU RS-485 loop, speed, 200 BPS, 1000m			
OPERATING	0°C50°C, 2090%RH, non condensing			
POWER SUPPLY	24VDC±10%, 1VA			
DISPLAY	61.5*39.6mm LCD with backlight			
TEMPERATURE SENSOR				
● NTS 9813	10KΩ @25°C (NTC) Thermistor, 0°C50°C, ±0.3°C @25°C			
	CMOS, 0°C50°C, ±0.2°C			
HUMIDITY SENSOR	CMOS, 0100%RH, ±2%RH			
CARBON DIOXIDE	Non-dispersive infrared (NDIR), 4004,0000ppm, ±30ppm+3% of reading			
CO2	ASC (Automatic Baseline Correction)			
	BC (Background Calibration)			
HOUSING	ABS+PC, IP30			
CERTIFICATION	CE(EMC Directive : 2014/30/EU)			
	FCC(Part 15,Subpart B, Class A)			
SHIPPING AND STORAGE	-4°F to 158°F (-20°C to 70°C), 5% to 95% RH non-condensing			

# **NTS 9800 SERIES SMART IAQ SENSOR**

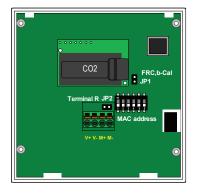
SMART IAQ SENSOR WITH LCD DISPLAY

SW	<ul> <li>SW → Set MAC address of actuator</li> </ul>	
+1 +2 +4 +8 +16 +32	Factory-set NO.1, The MAC address of actuator can be changed by the MAC address switch (Slide 1-6 of SW6) on the IAQ3S's housing inside. The location is on the back side inside the housing	
JP1 ● JP1→ BC (Background Calibration).		
	Plug jumper on JP1 and exposed to fresh outside air with CO2 concentration 400 ppm. then remove plug.	
JP2	<ul> <li>JP2 → Terminating resistor</li> </ul>	
OFF ON	Factory-set OFF, it is mean no terminating resistor on MOBUS RTU RS485, If JP2 is plug jumper, It is mean terminating resistor for last device on MOBUS RTU RS485.	

### **WIRING**



### **SETTING**



### **INSTALLATION**

#### Step 1: Opening NTS 9800 cover

Use a small flat Tip screwdriver to remove mounting cover from NTS 9800 Room Unit.

Use the screwdriver to push the bottom of the NTS 9800 Room Unit and lift up the ledge away from the cover.

Repeat for the other side of the cover.

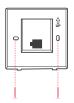




#### Step 2:

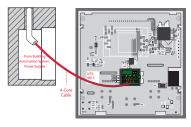
Mount the mounting cover of NTS 9800 on the wall switch box with 2 screws.

Ensure that the bottom Ventilation opening is not being blocked.



#### Step 3:

Connect the 4-core wire which is connected to the Building Automation System and power supply to the 3.5mm pluggable connector, and insert this connector to the socket on the port.



### Step 4:

Mount the front of the NTS 9800 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.



