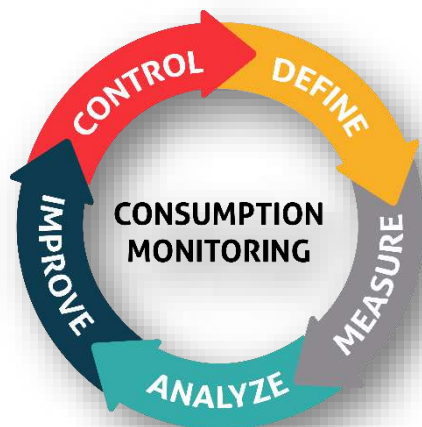


brief features

OTH900 offers precise temperature and humidity monitoring with advanced sensor technology as compare with other well-known brands.

The OTH900 Temperature and Humidity Data Terminal stands out for its exceptional ability to deliver precise measurements across a spectrum of environmental conditions. Designed to operate reliably in diverse settings, from fluctuating temperatures to varying humidity levels, this advanced terminal ensures consistent accuracy in monitoring both temperature and humidity.

Whether in controlled environments or challenging outdoor conditions, the OTH900 guarantees robust performance, making it the preferred choice for professionals seeking unparalleled reliability in temperature and humidity monitoring.

The intelligent OTH900 use advanced dual core MCU. Web enabled intuitive and easy-to-use menu for monitoring, configuration and diagnostics. Modbus RS485 option can be used to connect with any PLC or SCADA.

applications customers

APPLICATIONS

For application in industrial and commercial temperature monitoring

- Cold Storage Facility
- Server Rooms and Data Centers
- Pharmaceutical Storage
- Warehouses and Logistics
- Industrial Processes

CUSTOMERS

Industrial and commercial sectors, such as:

- Agriculture
- Textiles
- Pharmaceuticals
- Dairy Cooperatives
- Quality Control Labs
- Research Institutions
- Chemical processing
- Power plants
- Bulk customers (housing societies)
- Hotels

technical specifications

FEATURES

The OTH900 telemetry system with latest CPU with forward-thinking algorithms and web server function modules makes it more user friendly.

Informative

- Smart phone/Laptop any using web browser.
- Remote server

Temperature

- Measuring range: -20~60 °C
- Accuracy: $\pm 2^{\circ}\text{C}$

Humidity

- Measuring range: 5~95%
- Accuracy: $\pm 5\%$

Environmentally Tough

- UPVC housing
- Wiring harness IP65 with water proof glands

Easy To Use

Operation can be done within minutes. Connect the field instrument with pre made wiring harness. Keep it online and configure it by using local App and get the data on online remote server.

Housing:

- Housing: UPVC IP 65 water proof
- Mounting: Wall mounting
- Size: 140mm X 38mm X 35mm

Communications:

3 types of communications available

- Modbus RS485 (Master)
- Wi-Fi for Web Server
- GSM/GPRS 2G/3G (Optional)

Setup

- Calibration, Configuration & OTA: From any web browser through smart phone or laptop Wi-Fi

SPECIFICATIONS

Power Supply: 9~24 V DC, 5 W

Password: 4 Level of passwords restriction

- Admin Account
- Configuration
- SSID
- OTA

EEPROM:

Data retention 20,000 records (100 B/Record)

CPU:

- Dual core up to 240 MHZ
- Flash RAM: 4 MB
- SRAM: 520 KB SRAM

Backup power:

5~7 Hours with Li-ion battery (Optional)

Transmission: User programmable

- Interval: 1~60 Minutes
- Method: Using Mosquito broker via MQTT
- Protocol: MQTT

Configuration:

- Local: SPIFFS web browser
- Remote: Cloud server using MQTT protocol

Database: Mongo DB API development

Environmental:

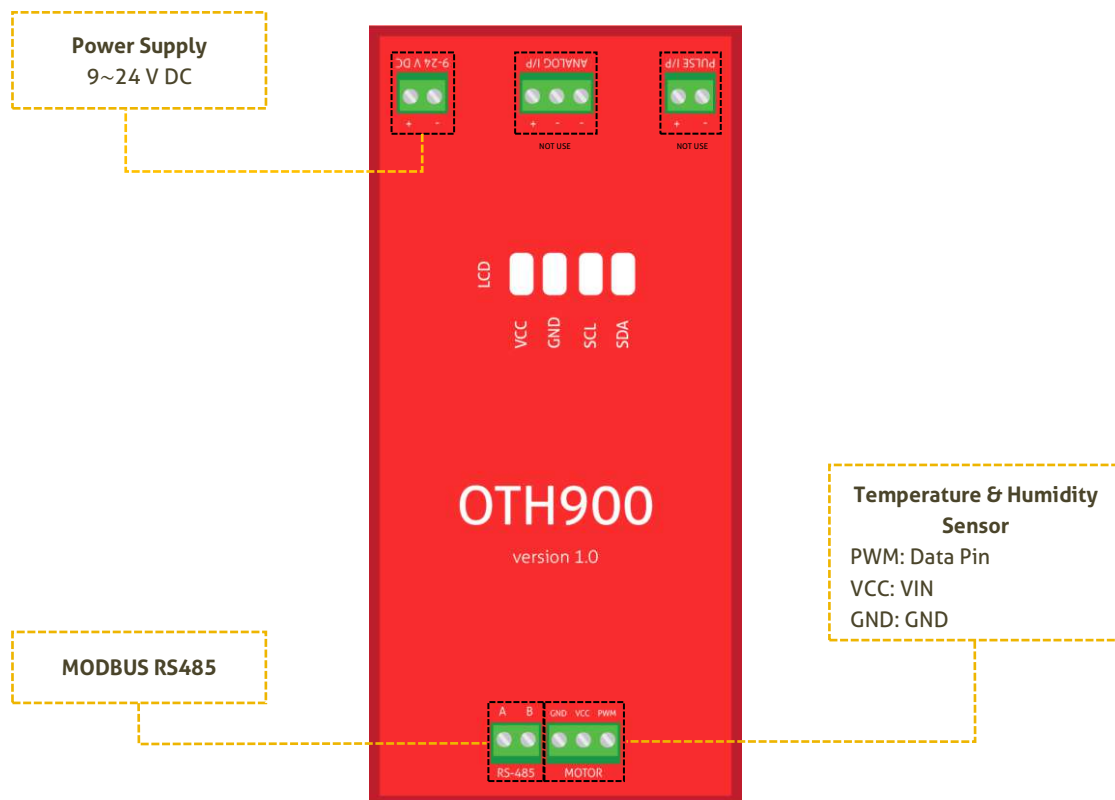
- Operating Temperature: -10~65 °C
- Storage: -40~85 °C
- Relative humidity: 10~90%

Connections:

- PCB: Removable screw terminal blocks
- Terminal block: Wire size: 0.5~0.7 mm
- Field connections: Wiring harness 3 meters

Warranty: 1 year after delivery

wiring connections



setup configuration

A user-friendly interactive web enabled browser interface for flow meter parameters configuration. Every screen is self-explanatory.

The screenshot shows the login page of the OTH900 device. It features a red header with the HUNCH logo on the left, the text "LOG IN Temperature & Humidity Sensor OTH9000000031" in the center, and a "forward thinking" tagline on the right. Below the header, there are two input fields: "User Name" and "Password". The "User Name" field contains the text "User Name" and the "Password" field contains the text "Enter password". A blue "LOG IN" button is located at the bottom right of the form.

1ST Page
For Login Page
IP: 192.168.9.54
SSID: OTH900000xxxx
Password: hunchxxxxxxxxxx
User Name: hunch
Password: 77xx



PROCESSING

Temperature & Humidity Sensor

OTH9000000031

forward

thinking

PARAMETER	PV	UNIT
Temperature	27.10	°C
Humidity	60.00	%

SETTINGS

CLOSE

Parameter display page



SETTINGS

Temperature & Humidity Sensor

OTH9000000031

forward

thinking

PARAMETER	SET VALUE	NEW VALUE
Temperature Unit	Celsius(°C)	Select Option ▾
Temp K.Factor	1.00	
Humidity K.Factor	1.00	
MQTT IP	amazonusa.link	
MQTT PORT	1883	
Modbus ID	2	
Baud Rate	9600	Select Option ▾
Parity	none	Select Option ▾
Stop Bits	1	Select Option ▾
Modbus Delay ms	1	
Client Name	PDH	
SSID	Strom Fiber	
Password	78900789	
Log Interval	62	
Meter ID	OTH9000000031	

RESTART

OTA

CLOSE

Settings Page
Configuration
Calibration



OTA SETUP

Temperature & Humidity Sensor

OTH9000000031

forward

thinking

Select file for updated version...

UPDATE

CLOSE

OTA
Over The Air firmware upload

communication Modbus tags

CONFIGURATION

OTH900 has built-in Wi-Fi module with complete SPIF web enabled stack. Therefore, there is no need of any special data communication hardware or software, an end user can easily configure it by using any browser through HTTP. In configuration mode OTH900 will act as a Master.

DATA LOGGING

Furthermore, OTH900 has comprehensive feature of data transferring of its tags to local or cloud server by using its built-in Wi-Fi module in Salve mode through HTTP/MQTT. By using feature end user can log the data to its local or remote server for online monitoring and reporting purpose.

MODBUS RS485

OTH900 has built-in Modbus RS485 module, therefore, end user can get the data to PLC, DCS, SCADA, OPC server or any data communication module/software.

Standard Modbus tags detail is as under for communication.

DEFINE NAME	TYPE	ADDRESS	
Meter ID	Swapped long	0X02	Function code: 03 or 04 Register type: Holding register
Temperature	Swapped long	0X04	
Humidity	Swapped long	0X06	

mounting instructions

For proper Temperature and Humidity measurement, OTH900 should be installed properly.



HUNCH AUTOMATION PRIVATE LIMITED

4/17 M Block, Gulberg III, Lahore, Pakistan
Email: info@hunch.com.pk
Website: www.hunch.com.pk