

DB801 RJ45 RS485 Indoor Humidity & Temperature Sensor

RJ45/RS485 Modbus temperature & humidity sensor with on-site display for multi-point networked monitoring.

Overview

The DABECO DB801 is an RS485 bus-type temperature and humidity sensor with an RJ45 interface, enabling multi-point simultaneous monitoring, networking, and remote transmission alongside on-site digital display. It is used for data communication in computer rooms, archives, libraries, warehousing, offices, and similar environments, and connects directly with various control equipment, display instruments, and computers. One network can monitor up to 32 points, and the built-in display screen allows direct on-site observation of temperature and humidity changes.

Operating Principle

A humidity and temperature sensing element communicates over an RS485 bus via RJ45 interface using standard Modbus protocol, allowing up to 32 addressable units to be networked on a single bus (addresses 1-255) for centralized, multi-point monitoring with remote transmission and local digital display.

Key Features

- RJ45 interface for RS485 bus connection
- Multi-point networking: up to 32 sensors per network
- Standard Modbus protocol, addresses 1-255
- Built-in on-site digital display
- Humidity range 0-100% RH; temperature -20 to 80°C (customizable)
- Communication distance up to 1200m

Benefits

- RJ45/RS485 networking simplifies large-scale, multi-point facility monitoring
- Standard Modbus protocol ensures easy integration with existing control systems
- On-site display allows quick local readings without a connected system
- Long communication distance (1200m) suits large buildings and facilities

Typical Applications

Computer / Server Rooms, Archives & Libraries, Warehousing, Offices, Building Automation & Remote Monitoring Networks

Technical Specifications

Measurement

Humidity Range	0-100% RH
Humidity Accuracy	±3.0% RH (20-80% RH @ 25°C)
Temperature Range	-20 to 80°C (customizable)
Temperature Accuracy	±0.4°C (20-80% RH @ 25°C)

Communications

Interface	RS485 (RJ45 connector)
Protocol	Standard Modbus
Distance	Less than 1200 m
Address Range	1-255
Baud Rate	1200-38400 bps
Response Time	15s

Power & Operation

Supply	12-24 VDC
Consumption	Less than 4 W
Operating Temperature	-20°C to 80°C

