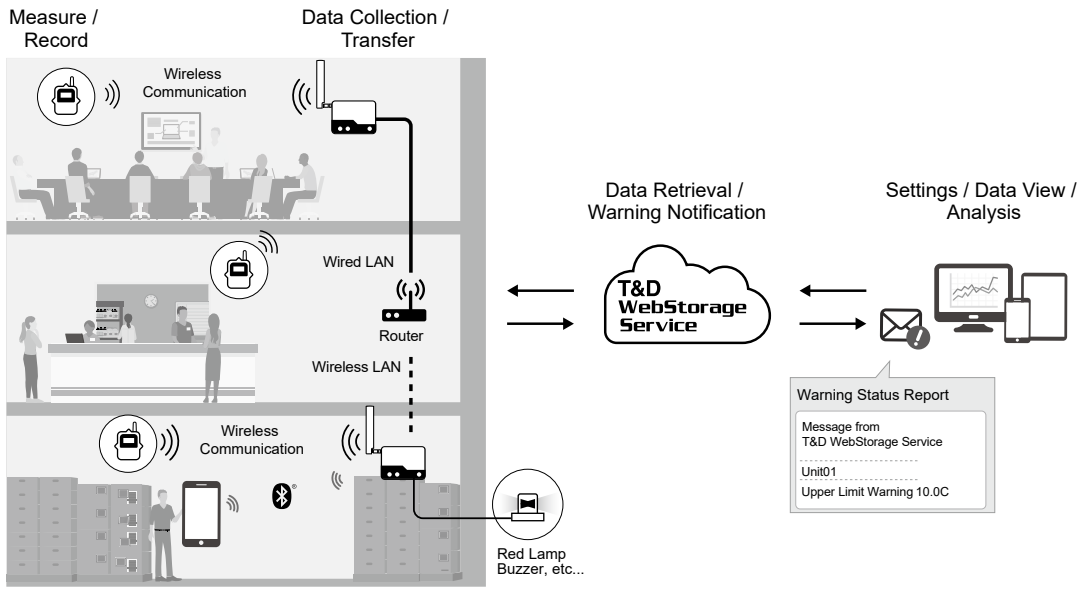
Oct. 2024

Network Base Station

RTR500BW Features and Specs

Data Transfer	Data Monitoring	Warnings	Warning Notification
Wireless LAN Wired LAN	T&D WebStorage Service, Internet/Intranet	Set Limit Exceeded, Sensor Error Communication Error etc...	E-mail, External Contact Output

RTR500BW is a wireless data collector (base unit) with built-in wireless/wired LAN communication capabilities.



Automatic Data Transmission via LAN

The RTR500BW uses wireless communication for data collection from loggers (remote units) and wireless LAN or wired LAN for automatic transmission to the server. The network connectivity makes it possible to build a stable data-collection system that does not depend on the PC environment.

Data Management in the Cloud

Recorded data can be automatically sent over HTTPS to our free cloud-based server “T&D WebStorage Service”. This service makes it easy to monitor data from any web browser on PC or mobile device, as well as to share data at various locations across any distance.

Warning Monitoring Function

When a measurement exceeds the set upper or lower limit, a warning report will be sent to up to four email addresses specified in the T&D WebStorage Service settings. By connecting a buzzer or lamp to the contact output, you can set up an on-site alarm.

Initial Settings via Bluetooth® or USB

Initial settings can be made either on a mobile device using Bluetooth or on a PC using USB.

Remote Settings

By using our mobile app, it is also possible to make settings remotely over the cloud, such as the device name, recording interval, warning conditions, additional device registration, etc.

Extension Possible for Wireless Communication

The wireless communication range between a base and a remote unit, if unobstructed and direct, is about 150 meters (500 ft). This range can be extended by using a wireless repeater (RTR500BC).

Auto Wireless Route Settings

The most suitable route is automatically selected for wireless communication. This function makes installation simple and easy, even in a large-scale building that requires multiple repeaters.

Data Management on Intranet

You can set up a PC as a data destination by installing our free-of-charge "T&D Data Server" software. Functions such as saving received recorded data, monitoring and graph display with a web browser, and warning mail transmission are available even in environments where you cannot use the cloud service.

Communication DLL specs for the RTR500B Series, as well as, file formats for Current Readings Files and Recorded Data Files (XML) are available free of charge to our customers. These allow you to integrate our products into your own applications and systems.

For pricing or any further information, please contact Omni Instruments Ltd.

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RTR500BW Specifications

	RTR500BW
Compatible Devices	Remote Units: RTR500B Series (RTR501B / 502B / 503B / 505B / 507B) Including L Type RTR-500 Series (RTR-574 / 576) Including S Type (*1) RTR-600 Series (RTR-602S / 602L / 602ES / 602EL) (*1) Repeaters: RTR500BC Other devices (*2)
Maximum Number of Registrations	Remote Units: 50 units Repeaters: 10 units x 4 groups
Communication Interfaces (*3)	Short Range Wireless Communication US Model: Frequency Range: 902 to 928 MHz RF Power: 7 mW Transmission Range: About 150 meters (500 ft) if unobstructed and direct (*4) EU Model: Frequency Range: 869.7 to 870 MHz RF Power: 5 mW Transmission Range: About 150 meters if unobstructed and direct Wired LAN (RJ45 connector 100 Base-TX/10 Base-T) Wireless LAN (IEEE 802.11 a/b/g/n, WEP (128bit) / WPA-PSK(TKIP) / WPA2-PSK (AES)) Bluetooth 4.2 (Bluetooth Low Energy) For Settings USB 2.0 (Mini-B connector) For Settings Optical Communication (proprietary protocol)
Communication Time	Data Download Time (for 16,000 readings) Via wireless communication: About 2 minutes An additional 30 seconds should be added for each Repeater. (*5)
External Output Terminal	PhotoMOS Relay Output OFF-State Voltage: AC/DC 50 V or less ON-State Current: 0.1 A or less ON-State Resistance: 35 Ω
Communication Protocol (*6)	HTTP, HTTPS, FTP, SNTP, DHCP, DNS
Power	AC Adaptor (AD-05A4 or AD-05C1) PoE (IEEE 802.3af)
Dimensions	H 83 mm x W 102 mm x D 28 mm (excluding antenna) Antenna Length: 115 mm
Weight	Approx. 130 g
Operating Environment	Temperature: -10 to 60 °C Humidity: 90 %RH or less (without condensation)
Included Items	Antenna CSR-0011, USB Mini-B Cable US-15C, AC Adaptor AD-05A4 or AD-05C1, Registration Code Label, Manual Set (Warranty Included)

*1: RTR-500 Series and RTR-600 Series (US Model only) do not have Bluetooth capability.
*2: Also compatible with the following discontinued products: RTR-501/502/503/507S/505, RTR-500, and RTR-601-110/130/E10/E30. Please refer to "Compatibility Info for RTR500B and RTR-500 Series" (https://tandd.com/information/compatible-rtr500b-loggers.html).
*3: There are US models and EU models in the RTR500B Series. They cannot be used together because they have different wireless specifications.
*4: Transmission range between RTR500BW and RTR-600 Series loggers is about 50 meters.
*5: When using RTR500BC as Repeater. Depending upon conditions it may take up to an additional 2 minutes.
*6: Client Function. Communication via proxy is not supported.
The specifications listed above are subject to change without notice.

For pricing or any further information, please contact Omni Instruments Ltd.

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