### **Wireless Base Station**

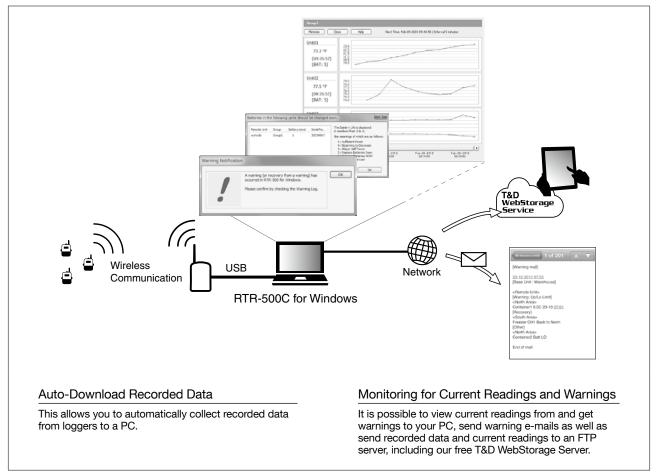
# **RTR-500 Features and Specs**

Data Transfer USB Data Monitoring
T&D Cloud Service,
Internet

Warning Monitoring
Set Limit Exceeded /
Sensor Error / Communication Error etc...

Warning Notification
E-mail
Software

This wireless base station can be connected to your PC via USB and with the supplied software you can easily collect and transfer recorded data from loggers as well and monitor for current readings and warnings. It can also be used as a repeater for our RTR-500 Series.



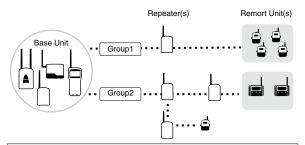
#### Easily Manage Up to 20 Groups x 32 Loggers

In each group it is possible to manage up to 32 separate data loggers (remote units), and up to 30 repeaters can be added to each group.

\* For RTR-574 and RTR-576, registration of one unit will be counted as two units

#### Use a Repeater to Expand Communication Range

The communication range between logger and base is about 150 meters (500 ft), but for RTR-500 Series this can be easily extended by adding RTR-500 units as repeaters.



Communication DLL specs for the RTR-500 Series, as well as, file formats for Current Readings Files and Recorded Data Files (XML) are available free of charge to our customers. With these it is possible to develop and create your own applications and systems.



## **RTR-500 Specifications**

|                                 | RTR-500  |
|---------------------------------|--|
| Compatible Devices              | Remote Units: RTR-501 / 502 / 503 / 507 / 574 / 576 / 505-TC / 505-Pt / 505-V / 505-mA / 505-P (Including L Type and H Type), RTR-601-110 / 130 / E10 / E30 (*1) (RTR-601 Series is available for US only.) Repeater: RTR-500  |
| Maximum Number of Registrations | Remote Units: 32 units (*2) x 20 groups<br>Repeaters: 30 units x 20 groups   |
| Communication Interfaces        | Between Base Unit(s) - (Repeaters) - Remote Unit(s) - Wireless Communication (short range radio communication) US: FCC Part15 Section247 / IC RSS-210 (Frequency Range: 902 to 928MHz, RF Power: 7 mW) EU: ETSI EN 300 220 (Frequency Range: 869.7 to 870MHz, RF Power: 5 mW) - Optical Communication (proprietary protocol) With compatible Remote Units except RTR-574 and RTR-576 |
|                                 | Between Base Unit - PC - USB Communication - Serial Communication (RS-232C) (*3)   |
| Wireless Transmission Range     | Approx. 150 meters ( 500 ft ) if direct and unobstructed   |
| Communication Time              | Data Download Time from RTR-500 Series Remote Unit (for 16,000 readings)  - Via wireless communication: About 2 min. The same amount of time will be necessary for each Repeater.  |
| Communications Protocol         | SMTP (POP before SMTP, SMTP-AUTH (LOGIN / PLAIN / CRAM-MD5), SMTP over SSL/TLS, STARTTLS), FTP (*4)  |
| Power                           | USB Bus Power, AA Alkaline Battery x 2, AC Adaptor ( AD-06A1 or AD-06C1 ) (*5)   |
| Battery Life (*6)               | As a Repeater: Approx. 6 months (When downloading full data once a day with one Repeater)  |
| Dimensions                      | H 96 mm x W 65 mm x D 25 mm, Antenna Length: 109 mm  |
| Weight                          | Approx. 70 g   |
| Operating Environment           | Temperature: -10 to 60 °C ( -30 to 60 °C with external power connected ) Humidity: 90 %RH or less ( no condensation )  |
| Accessories                     | Antenna, USB Mini-B Cable ( US-15C ), Software ( CD-ROM ), Memo Sticker, Manual ( Warranty Included )  |
|                                 | Software: RTR-500 for Windows  |
| Compatible Devices              | Remote Units: RTR-501 / 502 / 503 / 507 / 574 / 576 / 505-TC / 505-Pt / 505-V / 505-mA / 505-P (Including L Type and H Type), RTR-601-110 / 130 / E10 / E30 (RTR-601 Series is available for US only.) Repeater: RTR-500   |
| Compatible OS (*7)              | Microsoft Windows 10 32 / 64 bit Microsoft Windows 8 32 / 64 bit Microsoft Windows 7 32 / 64 bit Microsoft Windows Vista 32 bit ( SP1 or later )   |
| Display Languages (*8)          | US : English, Spanish, Portuguese<br>EU : English, Spanish, French, German, Italian  |
| Other                           | The Microsoft .NET Framework 3.5 SP1 is required.  |

<sup>\*1:</sup> Customers wishing to use the RTR-500 as a Base Unit in conjunction with the RTR-601 series devices, please contact your local distributor for the communications

protocol specifications to write your own software.
\*2: For RTR-574 and RTR-576, registration of one unit will be counted as two units.

\*7: For installation, it is necessary to have Administrator (Computer Administrator) rights.

\*8: We recommend using an operating system in the same language as the display language. Operation in different languages is not guaranteed. The specifications listed above are subject to change without notice.



<sup>\*3:</sup> Customers wishing to write their own software, please contact your local distributor for the serial communications protocol specifications. (Note: Optional serial communication cable TR-07C is also required.)
\*4: For RTR-500, the protocol is implemented in the software.

<sup>\*5:</sup> When using a USB connection, the RTR-500 requires neither batteries nor AC adaptor. Please prepare two AA batteries or an AC adaptor when using the RTR-500 as a

Repeater.

\*6: Battery life varies depending upon multiple factors including ambient temperature, frequency of communication, and battery performance. All estimates are based on operations carried out with a new battery and are in no way a guarantee of actual battery life.