

## Mobile Base Station

# RTR-500MBS-A Features and Specs

**Data Transfer**  
3G Mobile Communication (SIM Card)

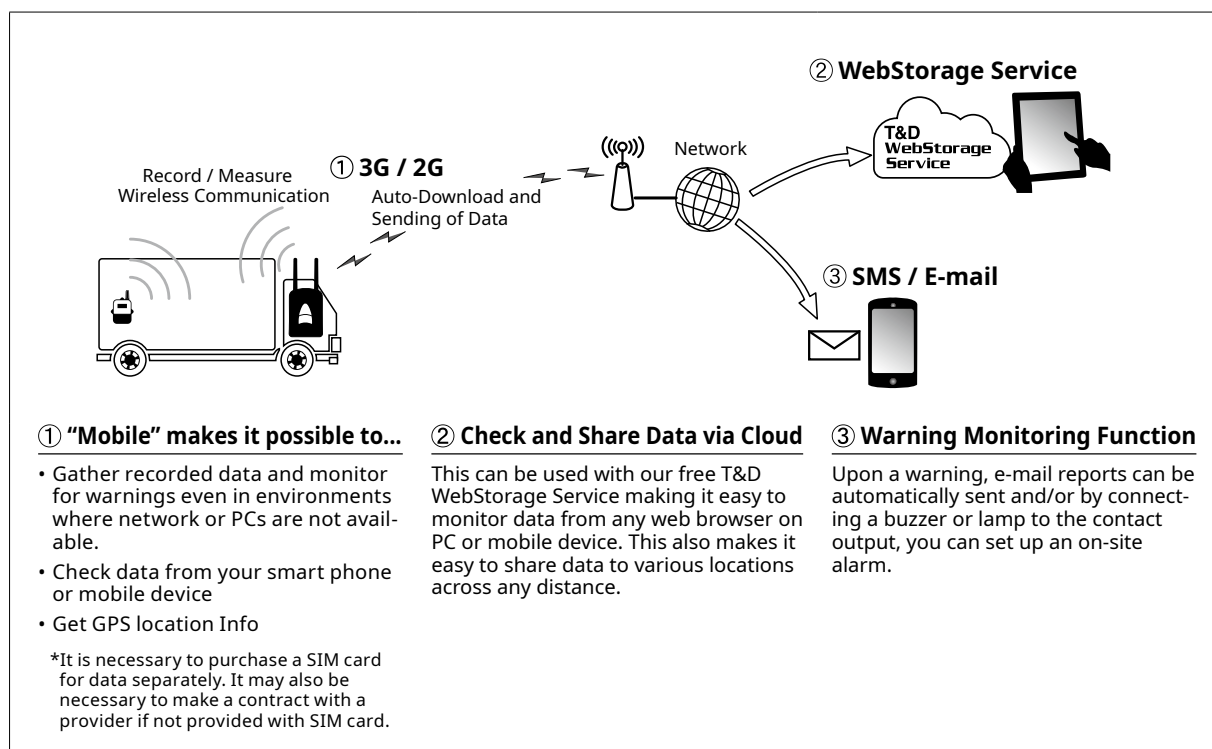
**Data Monitoring**  
T&D Cloud Service, Internet

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

**Warning Notification**  
E-mail / External Contact Output

This model mobile base station is designed for use with 3G cellular networking in cases where PCs and LAN networks are non-existent or impractical.

It collects data from nearby data loggers via wireless radio communication and then automatically sends it via 3G/2G cell phone networking to the set FTP server or e-mail. It is also compatible with T&D WebStorage Service making it easy to collect data and monitor readings without having to setup your own recipient server.



### Extension Possible for Wireless Communication

The communication range between logger and base is about 150 meters (500 ft), but this can be easily extended by adding a repeater unit.

### Choice of Power Supply

The collector will run for about 2 days\* solely off 4 AA alkaline batteries, but for use over longer periods use the optional AC adaptor or an external power source (DC10-24V).

\*Actual battery life is not guaranteed.

### Various Warning Settings

Warning Monitoring settings can be made for upper and lower limits, sensor error, logger battery level, communication error, and contact input.

### Register up to 20 Data Loggers

It is possible to manage up to 20 separate data loggers (remote units) from one RTR-500MBS-A. And for easy management you can create up to 4 groups, and up to 5 repeaters can be added to each group.

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

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. With these it is possible to develop and create your own applications and systems.



## RTR-500MBS-A Specifications

	RTR-500MBS-A
Compatible Devices	Remote Units: RTR501B / 502B / 503B / 505B / 507B RTR-501 / 502 / 503 / 507S / 574 / 576 / 505-TC / 505-Pt / 505-V / 505-mA / 505-P (Including L Type and S Type) Repeaters: RTR500BC, RTR-500
Maximum Number of Registrations	Remote Units: 20 units (*1) Repeaters: 5 units x 4 groups
Communication Interfaces	US: <Mobile Data Communication> WCDMA/HSDPA: 850 / 1900 MHz GSM/GPRS: 850 / 900 / 1800 / 1900 MHz <Between Base Unit(s) - (Repeaters) - Remote Unit(s)> • Short Range Wireless Communication FCC Part15 Section247 / IC RSS-210 Frequency Range: 902 to 928MHz, RF Power: 7mW • Optical Communication With compatible Remote Units except RTR-574 and RTR-576 <Between Base Unit - PC> • USB Communication (For Setup)  EU: <Mobile Data Communication> WCDMA/HSDPA: 900 / 2100 MHz GSM/GPRS: 850 / 900 / 1800 / 1900 MHz <Between Base Unit(s) - (Repeaters) - Remote Unit(s)> • Short Range Wireless Communication ETSI EN 300 220 Frequency Range: 869.7 to 870MHz, RF Power: 5mW • Optical Communication With compatible Remote Units except RTR-574 and RTR-576 <Between Base Unit - PC> • USB Communication (For Setup)
Wireless Transmission Range	Approx. 150 meters (500 ft) if direct and unobstructed
Communication Time	Data Download Time from Remote Unit (for 16,000 readings) Via wireless communication: About 2 min. The same amount of time will be necessary for each Repeater. Does not include communication time from Base Unit to server or e-mail.
External Alarm Input/Output Terminal (*2)	Input Terminal: Contact Input Internal Pull-up: 3V 100kΩ Maximum Input Voltage: 30V Output Terminal: Photo Mos Relay Output Voltage when OFF: AC/DC 50V or less Current when ON: 0.1A or less Resistance when ON: 35Ω
Communications Protocol	SMTP (POP before SMTP, SMTP-AUTH (LOGIN)), SMTPS (SMTP over SSL), FTP, SMS (*3)
Power	AA Alkaline Battery LR6 x 4 AC Adaptor AD-05A3 or AD-05C1 External Power Supply DC 10-24V
Battery Life (*4)	Expected battery life with only AA alkaline batteries: Approx. 2 days under the following conditions (only one Remote Unit and no Repeaters, warning monitoring ON, downloading data once a day, sending current readings at a 10 minute interval)
Dimensions	H 96 mm x W 66 mm x D 39 mm (excluding antenna) Antenna Length (Cellular/Local): 109 mm
Weight	Approx. 130 g
Operating Environment	Temperature: 10 to 55 °C (-10 to 55 °C with external power connected) Humidity: 90 %RH or less (no condensation)
Accessories	AA Alkaline Battery LR6 x 4, Antenna x 2 (Cellular/Local), USB Mini-B Cable US-15C, External Power Cable BC-0302, Manual (Warranty Included)
GPS Interface (*5)	Connector: SMA Male Plug Power Supply: 2.5 to 2.7V
SIM Card (*3) (*6)	Standard Size SIM Card (WCDMA or GSM)

\*1: For RTR-574 and RTR-576, registration of one unit will be counted as two units.

\*2: In order to use the external alarm terminal, please prepare a compatible connector: JST PAP-04V-S.

\*3: SMS is required for some functions of the RTR-500MBS-A. If SMS is necessary, make sure that the contract you have with your carrier includes this service.

\*4: Battery life varies depending upon multiple factors including number of warning reports sent, 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.

\*5: In order to use the GPS function (to attach geographical positioning info to current readings data), please purchase a compatible GPS antenna.

\*6: Please prepare a contracted SIM card separately.

The specifications listed above are subject to change without notice.

