Data Logger for Cloud Storage

TR-7wb/nw Series Features and Specs

TR-7wb/nw, with multiple types of communication interface (Bluetooth®, Wireless/Wired LAN and USB) have been designed to meet your temperature and humidity data management environment and needs.

<table>
<thead>
<tr>
<th>Model</th>
<th>Measurement Items</th>
<th>Measurement Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-71wb / nw</td>
<td>Temperature 2ch</td>
<td>-60 to 155 °C</td>
<td>The measurement range depends on the sensor type. Wide selection of optional sensors available</td>
</tr>
<tr>
<td>TR-72wb / nw</td>
<td>Temperature / Humidity 1ch Each</td>
<td>0 to 55 °C / 10 to 95%RH</td>
<td></td>
</tr>
<tr>
<td>TR-72wb-S / nw-S</td>
<td>Temperature / Humidity 1ch Each</td>
<td>-25 to 70 °C / 0 to 99%RH</td>
<td>The supplied sensor for the S model provides higher accuracy to ±2.5%RH</td>
</tr>
<tr>
<td>TR-75wb / nw</td>
<td>Temperature 2ch (Thermocouple)</td>
<td>-199 to 1760 °C</td>
<td>For use with Thermocouple Sensor Types: K, J, T, E, S, R</td>
</tr>
</tbody>
</table>

Sending Warning Report Mails
Warning e-mails can be sent upon T&D WebStorage Service receiving warning information from the data logger.

1.5 years of Operation on Two Batteries
Battery operation is possible for up to 1.5 years with just two AA alkaline batteries.

Large Logging Capacity: 8000 Readings per Channel
It is possible to record up to 8000 data readings in each of the two channels. If set at a recording interval of 60 minutes, it gives the user one year’s worth of measurements.

Easy Operation via Front Buttons
It is possible to start and stop recording, change recording interval, and make auto-upload setting from the buttons on the face of the logger.
## TR-7wb/nw Series - Specifications

### Measurement Channels

<table>
<thead>
<tr>
<th>TR-71wb / 71nw</th>
<th>TR-72wb / 72nw</th>
<th>TR-72wb-S / 72nw-S</th>
<th>TR-75wb / 75nw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature 2ch</td>
<td>Temperature 1ch, Humidity 1ch</td>
<td>Temperature 1ch, Humidity 1ch (High-Precision Type)</td>
<td>Temperature 2ch</td>
</tr>
</tbody>
</table>

### Sensor

<table>
<thead>
<tr>
<th>TR-71wb / 71nw</th>
<th>TR-72wb / 72nw</th>
<th>TR-72wb-S / 72nw-S</th>
<th>TR-75wb / 75nw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermistor</td>
<td>Thermistor</td>
<td>Thermistor</td>
<td>Thermocouple: Type K, J, T, E, S, R (*1)</td>
</tr>
<tr>
<td>Measurement Units</td>
<td>°C, °F</td>
<td>°C, °F</td>
<td>°C, °F</td>
</tr>
</tbody>
</table>

### Accuracy

<table>
<thead>
<tr>
<th>TR-71wb / 71nw</th>
<th>TR-72wb / 72nw</th>
<th>TR-72wb-S / 72nw-S</th>
<th>TR-75wb / 75nw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. ±0.3°C at -20 to 80 °C</td>
<td>±0.5°C at 25°C, 50%RH</td>
<td>±0.3°C at 10 to 40 °C</td>
<td>±2.5 %RH at 15 to 35 °C, 30 to 80 %RH</td>
</tr>
<tr>
<td>Avg. ±0.5°C at -40 to 20 °C 80 to 100 °C</td>
<td>±0.5% RH</td>
<td>±0.5°C at 10 to 40 °C</td>
<td>±2.5 %RH at 15 to 35 °C, 30 to 80 %RH</td>
</tr>
</tbody>
</table>

### Responsiveness

<table>
<thead>
<tr>
<th>TR-71wb / 71nw</th>
<th>TR-72wb / 72nw</th>
<th>TR-72wb-S / 72nw-S</th>
<th>TR-75wb / 75nw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Time Constant: Approx. 75 sec.</td>
<td>Response Time (90%): Approx. 190 sec.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Measurement Resolution</td>
<td>0.1°C</td>
<td>0.1°C</td>
<td>0.1°C</td>
</tr>
<tr>
<td>Response Time (90%):</td>
<td>-</td>
<td>Approx. 7 min.</td>
<td>-</td>
</tr>
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<td>Response Time (90%):</td>
<td>Approx. 7 min.</td>
<td>-</td>
<td>-</td>
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</table>

### LCD Display Items

- Measurements (fixed or alternating display), Battery Warning Mark, etc.
- Operating Environment
- Weight Approx. 55 g
- Dimensions H 58 mm × W 78 mm × D 26 mm
- Accessories
  - Temperature Sensor TR-0106 x2
  - Temperature-Humidity Sensor THA-3001 x1
  - High Precision Temperature-Humidity Sensor SHA-3151 x1

### Recording Mode

- Endless (Overwrite oldest data when capacity is full) or One Time (Stop recording when capacity is full)
- Auto-upload Interval
  - Select from 15 choices: OFF (No auto-upload), 1, 2, 5, 10, 15, 20, 30 min. or 1, 2, 3, 4, 6, 12, 24 hrs.

### Power (*6)

- Battery: AA Alkaline x 2, AA Ni-MH x 2
- External: USB Bus 5V 200mA, AC Adaptor AD-05A2 or AD-05C2, PoE IEEE 802.3af (TR-7nw only)

### Battery Life (*7)

- TR-7wb: Approx. 190 sec.
- TR-72wb: Approx. 10 days (when Auto-upload interval is 1 min)
- Approx. 1 year (when Auto-upload interval is 1 hr)
- *1.2 times longer with Bluetooth OFF
- Approx. 1.5 yrs with Bluetooth A-Upload OFF
- TR-7nw: Approx. 10 days (when Auto-upload interval is 1 min)
- *1.0 times longer with Bluetooth OFF
- Approx. 1.5 yrs with Bluetooth A-Upload OFF
- TR-75nw: Approx. 10 days (when Auto-upload interval is 1 min)
- Approx. 1 year (when Auto-upload interval is 1 hr)
- *1.2 times longer with Bluetooth OFF
- Approx. 1 yr with Bluetooth A-Upload OFF

### Communication Interfaces

| TR-7wb: Wireless LAN Communication | IEEE 802.11b/g/n
| TR-7wb: Bluetooth® Communication | Bluetooth 4.2 (Bluetooth low energy)
| TR-7wb: Wired LAN Communication | 10/100BASE-TX/10BASE-T (RJ45 Connector)
| USB Communication: USB 2.0 (Mini-B connector) | -

### Software Compatible OS (*8)

- TR-7wb/nw for Windows, T&D Graph, T&D Data Server (For PC)
- T&D Windows 10 32 / 64 bit, Microsoft Windows 8 32 / 64 bit, Microsoft Windows 7 32 / 64 bit
- T&D Thermo (For Mobile Devices)
- Android OS, iOS (For Mobile Devices)

### Display Languages

- English (*9)

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1. Compatible wire sizes are as follows.
2. When using external power, the internal temperature of the logger rises.
3. When continually used in environments with temperatures above 60 °C, accuracy of humidity measurements will decrease over time. Also, humidity cannot be measured at temperatures below -20 °C.
4. *: If you wish to use the WPS feature, set the security type of the wireless LAN access point to "WPA2-PSK(AES)" or "None".
6. *6: Approx. 1.5 yrs with Auto-Upload OFF
7. *7: Battery life varies depending upon multiple factors including frequency of communication, LAN environment, ambient temperature, recording interval, and battery performance.
8. *8: Windows 10 32 / 64 bit, Microsoft Windows 8 32 / 64 bit, Microsoft Windows 7 32 / 64 bit
9. *9: We recommend using an operating system in the same language as the display language. Operation in different languages is not guaranteed.