Data Logger for Cloud Storage
TR-7wf/nw Series Features and Specs

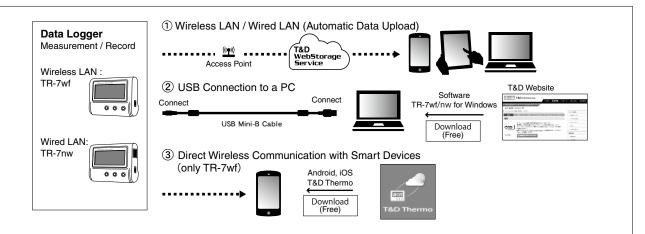| Measurement Items	Data Collection	Data Access	Warning Notification
Temperature Humidity	LAN / USB Connection Direct Communication with Smart phone/Tablet	T&D WebStorage Service, Intranet, Local PC	E-mail

Temperature and Humidity Data Logger made for the Cloud. Recorded data can automatically be uploaded via wireless or wired LAN to our free cloud service "T&D WebStorage Service" where it can be accessed from anywhere you have a connection. It is also possible to connect directly to a PC via USB and the TR-7wf allows for direct wireless communication with smart phones and other portable devices.

Data Logger
Measurement / Record

Wireless LAN : TR-7wf

Wired LAN: TR-7nw

① Wireless LAN / Wired LAN (Automatic Data Upload)
Access Point
T&D WebStorage Service

② USB Connection to a PC
Connect — USB Mini-B Cable — Connect
Software TR-7wf/nw for Windows
Download (Free)
T&D Website

③ Direct Wireless Communication with Smart Devices (only TR-7wf)
Android, iOS T&D Thermo
Download (Free)
T&D Thermo

① Automatically Upload Recorded Data via LAN

Automatically send recorded data via LAN connection to "T&D WebStorage Service". This feature makes it possible to access from and share data with any net connected device.

> * T&D WebStorage Service is a free cloud-based service provided by T&D Corporation.

② Directly Communicate with Smart Devices

By installing our specialized app it is possible to make settings changes from and download recorded data directly to your smarat device. It is also possible to view graphs and monitor in real time.

③ Easy USB Communication

You can easily start recording by simply connecting via USB to your PC without making LAN settings.
Collecting data and monitoring can also be easily carried out from your PC.

Model	Measurement Items	Measurement Range	Notes
TR-71wf / nw	Temperature 2ch	−60 to 155 °C	The measurement range depends on the sensor type. Wide selection of optional sensors available
TR-72wf / nw	Temperature / Humidity 1ch Each	0 to 55 °C / 10 to 95%RH	
TR-72wf-S / nw-S	Temperature / Humidity 1ch Each	−30 to 80 °C / 0 〜 99%RH	The supplied sensor for the S model provides higher accuracy to ±2.5%RH
TR-75wf / nw	Temperature 2ch (Thermocouple)	−199 〜 1760 °C	For use with Thermocouple Sensor Types: K, J, T, E, S, R

Sending Warning Report Mails

Upon receiving warning information from the target device T&D WebStorage Service will send out a warning e-mail to the set recipients

1.5 Years of Operation with just Two Batteries

With just two AA batteries the logger can be used for about 1.5 years.

> * Actual battery life is not guaranteed.

Large Logging Capacity: 8000 Data Sets

It is possible to record up to 8000 sets of data measurements in two separate channels. That means at a recording interval of 60 minutes you can keep on recording for one year before reaching capacity.
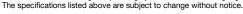
Easy Operation via Front Buttons

It is possible to start and stop recording, change recording interval, and make the auto-upload setting from the buttons on the face of the logger.

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TR-7wf/nw Series - Specifications

	TR-71wf / 71nw	TR-72wf / 72nw		TR-72wf-S / 72nw-S		TR-75wf / 75nw
Measurement Channels	Temperature 2ch (Internal 1ch / External 2ch)	Temperature 1ch, Humidity 1ch (External)		Temperature 1ch, Humidity 1ch (External)		Temperature 2ch (External)
Sensor	Thermistor	Thermistor	Polymer Resistance	Thermistor	Polymer Resistance	Thermocouple: Type K, J, T, E, S, R (*1)
Measurement Units	°C, °F	°C, °F	%RH	°C, °F	%RH	°C, °F
Measurement Range — Internal Sensor	-10 to 60 °C (*2)	-	-	-	-	-
Measurement Range — External Sensor	-40 to 110°C (Supplied Sensor) -60 to 155°C (Optional Sensor)	0 to 55 °C	10 to 95 %RH	–25 to 70 °C	0 to 99 %RH (*3)	K -199 to 1370 °C E -199 to 1000 °C J -199 to 1200 °C S -50 to 1760 °C T -199 to 400 °C R -50 to 1760 °C
Accuracy	Avg. ±0.3°C at −20 to 80 °C Avg. ±0.5°C at −40 to −20 °C 80 to 110 °C	±0.5°C	±5 %RH at 25°C, 50%RH	±0.3°C at 10 to 40 °C ±0.5°C all other temperatures	±2.5 %RH at 15 to 35 °C, 30 to 80 %RH	Thermocouple Measurement (Sensor inaccuracies not included) K, J, T, E : ±(0.5 °C + 0.3 % of reading) at −100°C or above S, R : ±(1.5 °C + 0.3 % of reading) at 100°C or above Cold Junction Compensation ±0.5°C at 10 to 40 °C ±0.8°C other temperatures within the operating environment of the logger
Measurement Resolution	0.1 °C	0.1°C	1 %RH	0.1 °C	0.1 %RH	K, J, T, E : 0.1 °C S, R : approx. 0.2 °C
Responsiveness	Thermal Time Constant: Approx. 75 sec. Response Time (90%): Approx. 190 sec.	Response Time (90%): Approx. 7 min.		Response Time (90%): Approx. 7 min.		-

LCD Display Items	Measurements (fixed or alternating display), Battery Warning Mark, etc.
Logging Capacity	8,000 data sets (One data set consists of readings for all channels in that type of unit.)
Recording Interval	Select from 15 choices: 1, 2, 5, 10, 15, 20, 30 sec. or 1, 2, 5, 10, 15, 20, 30, 60 min.
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.
Communication Interfaces	Wireless LAN Communication for TR-7wf: Standard: IEEE 802.11b Security (*4) : WEP (64 bit/128 bit), WPA-PSK (TKIP) , WPA2-PSK (AES) WPS 2.0 : Push Button Configuration, Protocol: HTTP (*5), DHCP, DNS Wired LAN Communication for TR-7nw: 100BASE-TX/10BASE-T (RJ45 Connector) Protocol: HTTP (*5) , DHCP, DNS USB Communication: USB 2.0 (Mini-B connector)
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)	With LAN communication: Approx. 10 days to 1.5 years Ex: Approx. 10 days when Auto-upload Interval is 1 min, 1 yr when 1 hr, 1.5 yrs when 12 hrs or more Without LAN communication: Approx. 1.5 years [TR-75: With LAN communication: Approx. 10 days to 1year Ex: Approx. 10 days when Auto-upload Interval is 1 min, 7 mos when 1 hr, 1yr when 12 hrs or more Without LAN communication: Approx. 1 year]
Dimensions	H 58 mm x W 78 mm x D 26 mm
Weight	Approx. 55 g
Operating Environment	Temperature −10 to 60°C / −10 to 45°C when using external power (TR-7nw only) Humidity 90 %RH or less (no condensation)
Accessories	Temperature Sensor TR-0106 x2 / Temperature-Humidity Sensor THA-3001 x1 / High Precision Temperature-Humidity Sensor SHA-3151 x1 / - AA Alkaline Battery LR6 x 2, Registration Code Label, USB Mini-B Cable US-15C, Manual Set (Warranty Included)
Software Compatible OS (*8)	TR-7wf/nw for Windows / T&D Graph / T&D Data Server (For PC) 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 (T&D Data Server not compatible) T&D Thermo (For Smart phone, Tablet) Android OS, iOS (For the compatible versions, please refer to our website.)
Display Languages (*9)	English

*1: Compatible wire sizes are as follows.
Single Wire : φ 0.32 to φ 0.65 mm (AWG 28 - 22), Twisted Wire : 0.08 to 0.32 mm² (AWG 28 - 22), φ 0.12 mm or more in diameter, Stripping Length : 9 to 10 mm
*2: When Auto Upload is used frequently, the measurement of the internal sensor may rise by around 0.3°C. When using external power, the data logger itself generates heat and the internal sensor will report a temperature much higher than ambient; we recommend using an external temperature sensor in this case.
*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: The WPS feature is not available when WEP (64bit/128bit) or WPA-PSK (TKIP) is selected in Access Point Settings. If you wish to use the WPS feature, please select WPA2-PSK (AES) or disable wireless security.
*5: HTTP client. Proxy supported. (for firmware version 1.05 or above for TR-71wf/72wf).
*6: When using external power, the internal temperature of the logger rises.
*7: Battery life varies depending upon multiple factors including frequency of communication, LAN environment, ambient temperature, recording interval, 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.
*8: For installation, it is necessary to have Administrator (Computer Administrator) rights.
*9: 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.

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