

## RTR-500 Series - Specifications

Remote Units (Data Logger )				
	RTR-574		RTR-574-H	
Temperature/Humidity Sensor ( External )	THA-3151		HHA-3151 ( High-Precision Type )	
	Thermistor	Polymer Resistance	Platinum Resistance	Electrostatic Capacitance
Measurement Channels	Temperature 1ch	Humidity 1ch	Temperature 1ch	Humidity 1ch
Units of Measurement	°C, °F	%RH	°C, °F	%RH
Measurement Range	0 to 55 °C	10 to 95 %RH	-30 to 80 °C	0 to 99 %RH
Accuracy	±0.5 °C	± 5 %RH [ at 25 °C, 50 %RH ]	± 0.3°C [ 0 to 50 °C] ± 0.5°C [ all other temperatures ]	±2.5 %RH [ at 25 °C, 10 to 85 %RH ] ±4.0 %RH [ at 25 °C, 0 to 10 % or 85 to 99 %RH ] At temperatures other than 25 °C and ≥ 0 °C, add ±0.1 %RH per degree of difference from 25. Humidity Hysteresis: ±1.5 %RH or lower <b>( *1 )</b>
Measurement Resolution	0.1 °C	1 %RH	0.1 °C	0.1 %RH
Responsiveness	Response Time ( 90% ) : Approx. 7 min.		Response Time ( 90% ) : Approx. 7 min.	Response Time ( 90 % ) : Approx. 20 sec.
Illuminance/UV Sensor ( External )	ISA-3151			
Measurement Channels	Illuminance: 1ch UV Intensity: 1ch			
Units of Measurement	Illuminance: lx, klx UV Intensity: mW/cm2			
Measurement Range	Illuminance: 0 lx to 130 klx UV Intensity: 0 to 30 mW/cm2			
Units of Cumulative Measurement	Cumulative Illuminance: lxh, klxh, Mlxh Cumulative amount of UV Light: mW/cm2h, W/cm2h			
Display Range of Cumulative Measurement	Illuminance: 0 lxh to 90 Mlxh UV Intensity: 0 mW to 62 W/cm2h			
Accuracy	Illuminance: 10 lx to 100 klx: ±5 % [ at 25 °C, 50 %RH] UV Intensity: 0.1 to 30 mW/cm2 : ±5 % [ at 25 °C, 50 %RH] <b>( *2 )</b>			
Relative Spectral Response	Illuminance: Approximated to the CIE standard response function V ( λ ) UV Intensity: 260 to 400 nm ( UVA / UVB )			
Measurement Resolution	Illuminance: Minimum of 0.01 lx UV Intensity: Minimum of 0.001 mW/cm2			
Responsiveness	Response Time ( 90% ) : 3 sec. ( at recording interval of 1 sec. ) 6 sec. ( at other intervals )			
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 <b>( *3 )</b>	Endless ( Overwrite oldest data when capacity is full ) or One Time ( Stop recording when capacity is full )			
LCD Display Items	Measurements, Battery Life Warning, etc. - Measurements: Illuminance / UV Intensity / Temperature / Humidity / Cumulative Illuminance / Cumulative amount of UV Light - Display Pattern: Alternating or Fixed display - Display Digits: Up to 4 digits			
Communication Interfaces	- Wireless Communication ( Short Range Radio Communication ) FCC Part15 Section247 / IC RSS-210 ( Frequency Range: 902 to 928 MHz, RF Power: 7 mW ) ETSI EN 300 220 ( Frequency Range: 869.7 to 870 MHz, RF Power: 5 mW ) - USB Communication - Serial Communication ( RS-232C ) <b>( *4 )</b>			
Wireless Transmission Range	Approx. 150 meters (500 ft) if direct and unobstructed			
Power	AA Alkaline Battery ( LR6 ) x 1			
Battery Life <b>( *5 )</b>	Approx. 4 months			
Dimensions	H 55 mm x W 78 mm x D 18 mm ( excluding protrusions ) Antenna Length: 60 mm			
Weight	Approx. 68 g ( including battery, excluding sensor )			
Operating Environment	Temperature: -10 to 60 °C Humidity: 90 %RH or less ( no condensation )			
Accessories	Temperature / Humidity Sensor ( THA-3151 )		Temperature / Humidity Sensor ( HHA-3151 )	
	AA Alkaline Battery ( LR6 ), USB Communication Cable ( US-15C ), Illuminance / UV Sensor ( ISA-3151 ), User's Manual Set ( Warranty Included )			
Compatible Base Units	RTR-500C, RTR-500NW/500AW, RTR-500DC			

\*1: When used in environments where temperature and humidity are over the values of 50°C 75%, 60°C 50%, 70°C 35%, and 80°C 25%, sensor hysteresis may fluctuate by values greater than ±1.5%RH. Under certain circumstances, it may take some time to return to normal measurement capability.

\*2: Compared to the value measured by the T&D standard sensor for calibration under our calibration light source.

\*3: Only "Endless" is available when using RTR-500W for Windows or RTR-500GSM for Windows.

\*4: For communication with the Data Collector RTR-500DC ( Note: Optional serial communication cable TR-6C10 is required. )

\*5: Battery life varies depending upon the ambient temperature in which it is used, the recording interval, the frequency of communication, and the 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.  
The specifications listed above are subject to change without notice.