Wireless Data Logging System RTR-500 Series Product Specifications

Wireless Data Loggers						
UNIT	RTR-501 / RTR-501L		RTR-502 / RTR-502L		RTR-503 / RTR-503L	
Measurement Items	Temperature		Temperature		Temperature	Humidity
Number of Channels	1 Ch		1 Ch		1 Ch	1 Ch
Unit of Measurement	°C , °F		°C , °F		°C,°F	%
Measurement Range	- 40 to 80°C		- 60 to 155°C		0 to 55°C	10 to 95%RH
Sensor Thermal Time Constant	Internal Temp. Sensor		External Temp. Sensor (TR-5106)		External Temp. and Hu	nidity Sensor (TR-3310)
Thermal Time Constant	L type: 25 minutes		Approx. 30 Sec. (in air) Approx. 4 Sec. (in agitated water)		-	
Sensor Response Time	-		-		About 7 min. (90% response)	
Measurement Accuracy	Avg. +/- 0.5 °C		Avg. +/- 0.3°C (-20 to 80°C) Avg. +/- 0.5°C (- 40 to -20°C / 80 to 110°C) Avg. +/- 10°C (- 60 to -40°C / 110 to 155°C)		Avg. +/- 0.3°C (at 25°C and 50%RH)	+/-5%RH (at 25°C and 50%RH)
Measurement Display Resolution	h 0.1°C		0.1°C		0.1°C	1%RH
Logging Capacity	16,000 readings		16,000 readings		8,000 data sets (*1)	
Water Resistance	Immersion Proof		S		Splash Proof (*6)	
Unit	RTR-505-TC / 505-TCL RTR-5		505-Pt / 505-PtL RTR-505-V / 505-VL		RTR-505-mA / 505-mAL	RTR-505-P / 505-PL
Measurement Items	Temperature (Type K, J, T, S) Tempera		ature (Pt100, Pt1000) Voltage		4-20mA	Pulse
Unit of Measurement	°C , °F		°C , °F Vdc		mA	Pulse Count / Interval
Recording Intervals	Select from 15 choices: 1, 2, 5, 10, 15, 20 and 30 sec./ 1, 2, 5, 10, 15, 20, 30 and 60 min.					
Logging Capacity Recording Modes (*2)	16,000 readings ENDLESS (Upon reaching logging capacity, the oldest data is overwritten and recording continues)					
Recording Wodes (2)	ONETIME (Upon reaching logging capacity, ne order unit as over which and recording continues)					
LCD Display Items	Current Readings, Recording Status, Battery Life Warning, Messages, Unit of Measurement					
Power	Lithium Battery (LS14250 (SAFT)) x 1 / L type: Large Capacity Battery Adaptor Kit (RTR-500B1) x 1 (*5) External Power Adaptor Kit (RTR-500A1) (sold separately)					
Battery Life (*3)	About 10 months / L type: About 4 years The stated battery life is for when it is used in an environment of 25°C and recorded data is downloaded at a rate of once a day or "Monitoring Current Readings" occurs at a rate of once every 10 minutes.					
Communication Interfaces	Short Range Radio / Optical Communication					
Radio Standard Specifications	FCC Part15 Section247 / IC RSS-210 (Frequency Range: 902 to 928MHz) / ETSI EN 300 220(Frequency Range: 869.7 to 870MHz)					
Wireless Transmission Range	About 150meters (500ft) if unobstructed and direct					
Communication Time	when downloading one Remote Unit at full logging capacity: Wireless communication : about 2 min.(*4) / Optical communication : about 160 sec.					
Water Resistance	Splash Proof (*6)					
Dimensions	H62mm x W47mm x D19mm / L type: D46.5mm (with Large Capacity Battery Pack) (excluding protrusions / antenna length 24mm)					
Weight	About 56g (including 1 lithium battery) / L type: about 109g (with Large Capacity Battery Pack)					
Unit Temp. Resistance	(Unit temp resistance and measurement range is -40 to 80 °C but wireless communication cannot occur in an environment of less than -30 °C)					
Others	In order to download data via wireless communication, it is necessary to purchase a Base Unit: RTR-500GSM, RTR-500, RTR-500AW, RTR-500DV, or RTR-500DC					
LINIT RTR-574						
Measurement Items	Illuminance		UV Intensity		Temperature	Humidity
Number of Channels	1 Ch		1 Ch		1 Ch	1 Ch
Unit of Measurement	lx, Klx		mW/cm ²		°C , °F	%
Measurement Range	0 to 130,000lx		0 to 30mW/cm ²		0 to 55°C	10 to 95%RH
Measurement Resolution	Minimum: 0.01 lx		Minimum: 0.001 mW/cm ²		0.1°C	1%RH
Measuring Accuracy	10 to 100,000 lx: +/-5% (At 25°C, 50%RH)		0.1 to 30 mW/cm ² : +/-5% (At 25°C, 50%RH) (*7)		Avg. +/-0.3°C	+/-5% (At 25°C, 50%RH)
Display Range of Cumulative Measurement	0 to 90,000,000 lx.h		0 to 62W/cm².h		-	-
Unit of Cumulative Measurement	Cumulative Illuminance lx.h, Klx.h, Mlx.h		Cumulative Amount of UV Light mW/cm ² .h, W/cm ² .h		-	-
LCD Refresh Interval	1 second (At a recording Interval of 1 second) / 2 seconds (At a recording interval of 2 seconds or more)					
Recording Intervals	Select from 15 choices: 1, 2, 5, 10, 15, 20 and 30 sec. / 1, 2, 5, 10, 15, 20, 30 and 60 min.					
Logging Capacity (*1)	8,000 data sets					
Recording Modes (*2)	ENDLESS (Overwrite oldest data when capacity is full) / ONETIME (Stop recording when capacity is full)					
LCD Displayed Items(*8)	Recording Status, Amount of Recorded Data, Communication Status, Recording Mode, Battery Life Warning, Unit of Measurement Current Readings (Illuminance / UV Intensity / Temperature / Humidity), Cumulative Measurements (Cumulative Illuminance and Cumulative Amount of UV Light),					
Communication Interfaces	Short Range Radio, USB, RS-232C (Serial) Communication (*9)					
Communication Time	When downloading one Remote Unit at full storage capacity: Wireless Communication = about 4 min. (*4) / USB Communication = about 45 sec.					
Radio Standard Specifications	FCC Part15 Section247 / IC RSS-210 (Frequency Range: 902 to 928MHz) / ETSI EN 300 220(Frequency Range: 869.7 to 870MHz)					
Wireless Transmission Range	About 150 meters (500 ft) if unobstructed and direct					
Power	AA Alkaline Battery (LR6) x 1					
Battery Life (*3)	About 4 months					
Dimensions	H55mm x W78 mm x D18 mm (excluding protrusions) / Antenna Length: 60mm					
Operating Environment	Temperature : 10 to 60 °C / Humidity : 00% PH or less (no condensation)					
Operating Environment	In order to download data via wireless communication, it is necessary to nurchase a Base Unit: RTP 500 DTP 500AW/ PTP 500AW/ or PTP 500DC					
0 11613	Not waterproof, moistureproof, or dustproof.					