USB Connectable Loggers
TR-74Ui Features and Specs

Measurement Items	Data Collection	Data Access	Warning Notification
Temperature / Humidity / Illuminance / UV Intensity	USB Connection Infrared Communication	Local PC	None

The TR-74Ui can simultaneously measure and record four items: Illuminance, Ultraviolet Light (UV), Temperature and Humidity. In addition it is capable of displaying Cumulative Illuminance and Cumulative Amount of Ultraviolet Light in the LCD screen. From dim moonlight to the summer sun, illuminance can be measured within a wide range. Downloading data can be carried out by connecting directly to a PC via a USB cable, or by using infrared communication to download to the Data Collector.

One Unit Measures and Records Illuminance, Ultraviolet Light (UV), Temperature and Humidity

This data logger can simultaneously measure and record all four items.

Large Logging Capacity of 8000 Data Sets

Record up to 8,000 sets of data of all four measurement channels.

View Cumulative Illuminance and Cumulative Amount of Ultraviolet Light

While recording it is possible to view both cumulative illuminance and cumulative UV light on the logger's LCD.

Cumulative Illuminance : 0 to 90,000,000 lxh
Cumulative Amount of Ultraviolet Light : 0 to 62 $W/cm^2 \cdot h$

Measure even in Low Light Conditions

Illuminance Measurement Range is from 0 to 130,000 lx With a measurement resolution down to 0.01 lx it is possible to detect changes in illuminance even under moonlight.

View All Data in One Graph

The supplied software enables viewing of all four measurement items in one graph or one list. Easy to print and export data in text format (CSV).

Simple USB Connection to PC

Settings and downloading can easily be done via PC.

It is also possible to monitor current readings from the TR-74Ui connected to your PC.

Operate for 6 Months on Just 1 Battery

Continual operation can be carried out for up to 6 months with just 1 AA Alkaline Battery.

 * Actual battery life is not guaranteed.

Easy Operation via Buttons

From the buttons on the logger face you can start and stop recording, make recording interval changes and switch display settings.

Measure and Record Temperature and Humidity in a Wider Range with Greater Accuracy

The supplied sensor for the S model provides higher accuracy to ±2.5%RH

Measurement Range for temperature is –25 to 70°C and 0 to 99 %RH for humidity.

Download Data via Infrared Communication

It is possible to use with Data Collector TR-57DCi.

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TR-74Ui Specifications

	TR-74Ui		TR-74Ui-S	
	Temperature-Humidity Sensor (External)			
Measurement Channels	Temperature 1ch	Humidity 1ch	Temperature 1ch	Humidity 1ch
Sensor	THA-3151		SHA-3151 High-Precision Type	
	Thermistor	Polymer Resistance	Thermistor	Polymer Resistance
Measurement Units	°C, °F	%RH	°C, °F	%RH
Measurement Range	0 to 55 °C	10 to 95%RH	−25 to 70 °C	0 to 99 %RH (*1)
Accuracy	±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
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.	
	Illuminance-UV Sensor (External)			
Measurement Channels	Illuminance: 1ch UV Intensity: 1ch			
Sensor	ISA-3151			
Measurement Units	Illuminance: lx, klx UV Intensity: mW/cm^2			
Measurement Range	Illuminance: 0 lx to 130 klx UV Intensity: 0 to 30 mW/cm^2			
Units of Cumulative Measurement	Cumulative Illuminance: lxh, klxh, Mlxh Cumulative amount of UV Light: mW/cm^2h, W/cm^2h			
Display Range of Cumulative Measurement	Illuminance: 0 lxh to 90 Mlxh UV Intensity: 0 mW to 62 W/cm^2h			
Accuracy	Illuminance 10 lx to 100 klx: ±5 % at 25°C, 50 %RH UV Intensity 0.1 to 30 mW/cm^2 : ±5% at 25°C, 50 %RH (*2)			
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: 0.01 lx UV Intensity : Minimum of 0.001 mW/cm^2			
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	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	USB Communication Infrared Communication IrPHY 1.2 low power (*3) Serial Communication RS-232C (*4)			
Power	AA Alkaline Battery x 1			
Battery Life (*5)	Approx. 6 months			
Dimensions	H 55 mm x W 78 mm x D 18 mm			
Dimensions	Approx. 40 g			
Operating Environment	Temperature −10 to 60°C Humidity 90%RH or less (no condensation)			
Accessories	Temperature-Humidity Sensor THA-3151 Illuminance-UV Sensor ISA-3151		High Precision Temperature-Humidity Sensor SHA-3151 Illuminance-UV Sensor ISA-3151	
	AA Alkaline Battery LR6, USB Mini-B Cable US-15C, Software CD-ROM, User's Manual Set (Warranty Included)			
	Software : Illuminance UV Recorder for Windows			
Compatible OS (*6)	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)			
Display Languages (*7)	English			

*1: 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.
*2: Compared to the value measured by the T&D standard sensor for calibration under our calibration light source.
*3: If you wish to use infrared communication to download recorded data, it is necessary to purchase the Data Collector TR-57DCi (sold separately).
*4: Customers wishing to write their own software, please contact your local distributor for the serial communications protocol specifications. (Note: Optional serial communication cable TR-07C is also required.)
*5: Battery life varies depending upon multiple factors including ambient temperature, recording interval, 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. When infrared communication function is enabled, battery life may be shortened if the unit is used under the inverter type fluorescent lighting.
*6: For installation, it is necessary to have Administrator (Computer Administrator) rights.
*7: 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.