

TR-76Ui - CO2 Data Logger

Overview	Functions	Specifications	Software	Options
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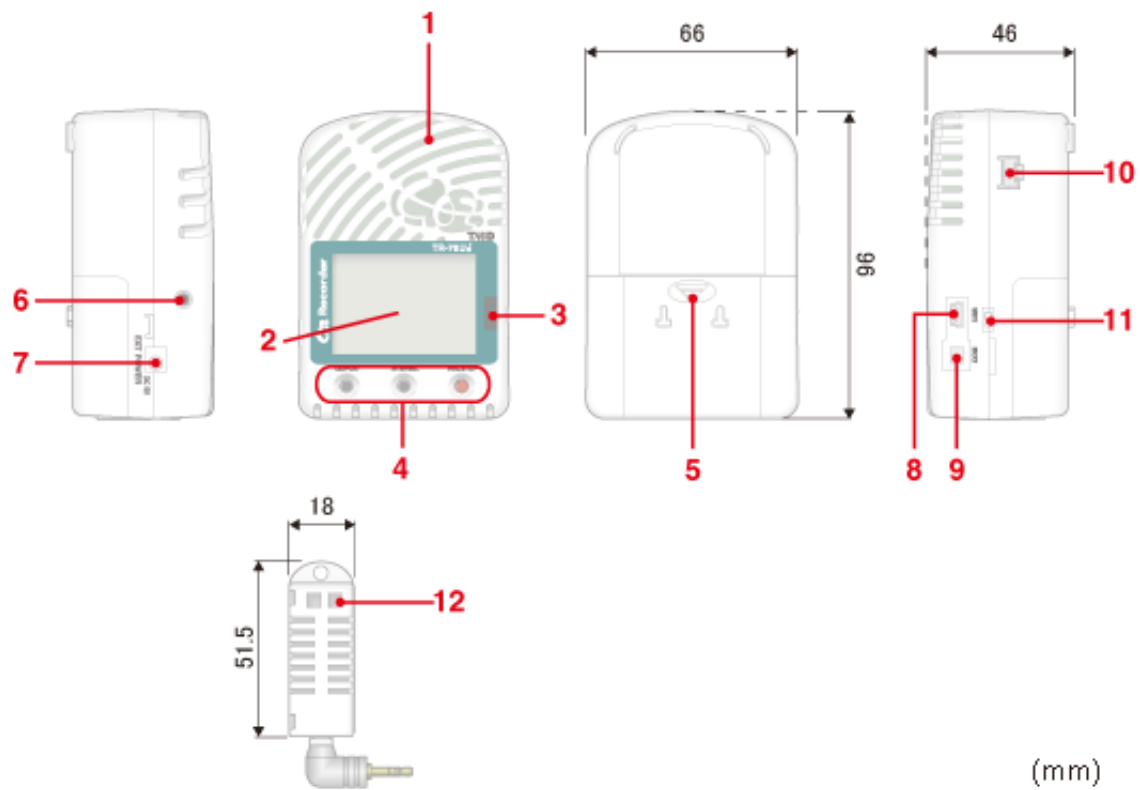
Specifications

Product	TR-76Ui		TR-76Ui-H	
Temperature/Humidity Sensor (External)	THA-3001		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
	(Note: Operating environment of the TR-76Ui itself is 0 to 45 °C, 90 %RH or less)			
Accuracy	±0.5°C	±5%RH [at 25°C, 50%RH]	±0.3°C [10 to 40°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 (*1)
Measurement Resolution	0.1 °C	1 %RH	0.1 °C	0.1 %RH
Response Time (90%)	Approx. 7 min.		Approx. 7 min.	Approx. 20 sec.
CO2 Sensor (Internal)	NDIR			
Measurement Channels	CO2 Concentration 1ch			
Units of Measurement	ppm			
Measurement Range	0 to 9,999 ppm			
Accuracy	±(50 ppm + 5 % of reading) (*2) [at 5,000 ppm or less]			
Measurement Resolution	Minimum of 1 ppm			
Response Time (90%)	Approx. 1 min.			
Logging Capacity	8,000 data sets (One data set consists of readings for CO2 concentration, Temperature and Humidity measurements.)			
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 Level, etc. - Measurements: CO2 concentration, Temperature or Humidity (fixed or alternating display)
Communication Interfaces	USB Communication, Serial Communication (RS-232C) (*3), Infrared Communication (IrPHY 1.2 low power) (*4)
Communication Time	Downloading time for one unit at full capacity - Via USB communication: approx. 45 sec. - Via infrared communication: approx. 60 to 80 sec.
External Alarm Terminal (*5)	Output Terminal: Open Drain Output (Voltage when OFF: DC less than 30V / Current when ON: less than 0.1A / Resistance when ON: about 15Ω)
Power	AC Adaptor (AD-0638 or AD-0638-C), AA Alkaline Battery (LR6) x 4
Battery Life	Approx. 2 days (batteries only without AC adaptor) (*6)
Dimensions	H 96 mm x W 66 mm x D 46 mm (excluding protrusions and sensor)
Weight	214 g (including batteries, excluding sensor)
Operating Environment	Temperature: 0 to 45 °C, Humidity: 90 %RH or less (no condensation)
Accessories	AA alkaline battery (LR6) x 4, AC Adaptor (AD-0638 or AD-0638-C), USB Communication Cable (US-15C), Temperature/Humidity Sensor (THA-3001 or HHA-3151), Software (CD-ROM), User's Manual Set (Warranty Included)
<p>*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.</p> <p>*2: Stated value is the measurement accuracy of the CO2 sensor when Auto Calibration is operating properly. A change in atmospheric pressure directly influences the reading of CO2, which can cause measurement errors; a decrease in pressure by 10hPa results in a relative decrease in CO2 by 1.6%. In such a case, we recommend carrying out the "Atmospheric Pressure Correction" function found in CO2 Recorder for Windows.</p> <p>*3: 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.)</p> <p>*4: If you wish to use infrared communication to download recorded data, it is necessary to purchase the Data Collector TR-57DCi (sold separately).</p> <p>*5: In order to use the external alarm terminal, please prepare a compatible connector: JST PAP-04V-S.</p> <p>*6: 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. Battery life may be shortened if the unit is used under inverter type fluorescent lighting.</p>	

Dimensions

TR-76Ui



1. CO2 Sensor Area (Internal)
2. LCD Display
3. Infrared Communication Port
4. Operation Buttons
<DISPLAY> button, <INTERVAL> button, <REC/STOP> button
5. Battery Cover
6. Sensor Jack
7. AC Adaptor Jack
8. USB Communication Cable Jack
9. Serial Communication Cable Jack (RS-232C)
10. External Alarm Terminal (EXT ALM)
11. <POWER> switch
12. Temperature and Humidity Sensor