

## USB Connectable Loggers

# TR-73U Features and Specs

### Measurement Items

Temperature, Humidity  
Barometric Pressure

### Data Collection

USB Connection

### Data Access

Local PC

### Warning Notification

None

The TR-73U is a three-channel data logger designed to simultaneously measure and record barometric pressure, temperature and humidity.

### Measure and Record Barometric Pressure, Temperature and Humidity with 1 Logger

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

### Large Logging Capacity of 8000 Data Sets

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

### View All Data in One Graph

Using our software it is possible to view all three measurement items in one graph or one list. Easy to print and export data in text format (CSV).

### Simple, Direct USB Connection

Settings and downloading can easily be done via PC. It is also possible to monitor current readings from the TR-73U connected to your PC.

### 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.

### Operate for 10 Months on Just 1 Battery

Continual operation can be carried out for up to 10 months with just 1 AA Alkaline Battery.

\* Actual battery life is not guaranteed.

The electromagnetic radiation level of the TR-73U has been tested and shown to not be above levels as outlined by the RTCA in "Section 21 of DO-160E" dealing with "Emission of Radio Frequency Energy".

#### About the RTCA DO-160E Section 21:

RTCA stands for the "Radio Technical Commission for Aeronautics". The "DO-160E", published by RTCA, is widely used as a standard for environmental qualification testing to show compliance with appropriate airworthiness requirements. "Section 21 of DO-160E" concerns the "Emission of Radio Frequency Energy". The tests in this section are performed to determine that the device does not emit radio frequency interference in excess of the specified limits. Every carry-on electronic device must comply with radio frequency emission and susceptibility guidelines outlined in "Section 21 of the RTCA DO-160E" document, whether it flies in the passenger cabin or cargo hold. The "DO-160E" is recognized by the International Organization for Standardization (ISO) as a de facto for international standard "ISO-7137".

## TR-73U Specifications

	TR-73U		
Measurement Channels	Temperature 1ch	Humidity 1ch	Barometric Pressure 1ch
Sensor	Temp-Humidity Sensor TR-3100 (External) (*1)		Barometric Pressure Sensor (Internal)
	Thermistor	Polymer Resistance	
Measurement Units	°C, °F	%RH	hPa
Measurement Range	0 to 50°C (Supplied Sensor) -40 to 110°C (Optional Sensor)	10 to 95 %RH	750 to 1100 hPa
Accuracy	Avg. $\pm 0.3^{\circ}\text{C}$ at 0 to 50°C	*1: 1. $\pm 5\% \text{RH}$ at 25 °C, 50 %RH	$\pm 1.5 \text{ hPa}$
Measurement Resolution	0.1°C	1 %RH	0.1 hPa
Responsiveness	Response Time (90%): Approx. 7 min.		4 seconds or 40 seconds if recording interval is 10 sec. or more.
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 (fixed or alternating display), Recording Status, Recording Mode, Battery Warning Mark, etc.		
Communication Interfaces	USB Communication: USB 2.0 (Mini-B connector) Serial Communication (*2)		
Power	AA Alkaline Battery LR6 x 1		
Battery Life (*3)	Approx. 10 months		
Dimensions	H 55 mm x W 78 mm x D 18 mm		
Weight	Approx. 40 g		
Operating Environment	Temperature: -10 to 60°C Humidity: 90%RH or less (no condensation)		
Accessories	AA Alkaline Battery LR6, USB Mini-B Cable US-15C, Temperature-Humidity Sensor TR-3100 x 1, User's Manual Set (Warranty Included)		

\*1: It is also possible to measure temperature with the internal sensor. However, the measurement range is restricted to the operating environment for the whole device.

\*2: 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.)

\*3: 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.

The specifications listed above are subject to change without notice.