Thermo Recorder

T AND D

High Precision Wide Range Temperature and Humidity Data Logger

TR-77Ui

CE

High Accuracy Wide Range Model

► The TR-77Ui is our newest high-specification model designed to simultaneously measure and record temperature and humidity with improved accuracy and within a wider range.

► The improved more durable sensor can be exposed to short term moisture and after simply drying can be re-used.

► All-in-One Package: Simply connect to a PC via supplied USB cable, carry out a few easy settings and measurement and recording can be started.

► The measurement and recording range for temperature is from -30 to 80°C and for humidity is from 0% to 99%RH with accuracy reaching ±2.5%RH at 25°C and 10 to 85%RH.

► The low energy consumption circuit design provides up to ten months of operation with just one AA alkaline battery.

System Setup

Data Logger　　TR-77Ui

Included — Temperature/Humidity Sensor HHA-3151

Included — AA Alkaline Battery × 1

Included — USB Communication Cable

Sold Separately — Serial Communication Cable

Computer

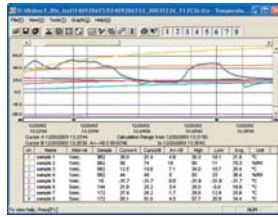Included — Software (T&D Recorder for Windows)

Installing the Software

Software

T&D Recorder for Windows

Easy to use Windows compatible software allows you to control all aspects of set up for any TR-77Ui Unit, as well as to print, and to create text files, tables, and colorful graphs from the recorded data.

Up to 8 Channels of Data can be Processed at One Time

By simply downloading the data from the Unit a colorful graph representing that data will be automatically created. Up to 8 channels (4 Units) of data can be represented in one graph.

Creating Text Files

You can create Text Files (CSV format, etc...) to allow you the option of processing and managing your data using Excel, Lotus or any other popular spreadsheet software.

Graph / Table Printing Function

You can print out in color or monochrome the graphs just as they appear on your screen. You can also print out in table form all of the data in order of date and time.

Specifications

Unit	TR-77Ui	
Measurement Channels	2 Channels (Temperature and Humidity)	
Measurement Items	Temperature	Humidity
Measurement Range	-30 to 80°C	0 to 99% RH
Measuring Accuracy (Standard Sensor)	±0.3°C (at 10 to 40°C) ±0.5°C (at other temp)	±2.5%RH (at 25°C and 10 to 85% RH) ±4.0%RH (at 25°C and 0 to 10%, or 85 to 99% RH) ±0.1% RH / °C (When at other than 25°C add to the accuracy noted above) Hysteresis: ±1.5%RH or lower
Measurement / Display Resolution	0.1°C	0.1%RH
Sensor	Platinum Resistor Sensor	Capacitance Type
Recording Interval	Total of 15 choices: 1, 2, 5, 10, 15, 20, 30 seconds, 1, 2, 5, 10, 15, 20, 30, 60 minutes	
Recording Capacity	8,000 Readings × 2 Channels	
Recording Modes	Endless (Overwrite oldest data when capacity is full) / One-time (Stop recording when capacity is full)	
LCD Displayed Items	Measurements (Ch1 only, Ch2 only, alternating display), Recording Status, Battery Life Warning, Amount of Recorded Data, Unit of Measurement	
Power	AA Alkaline Battery LR6 × 1	
Battery Life*2	About 10 months	
Data Back-up	Activated when battery power is low or when switch is off	
Communication Interface	USB Communication, Serial (RS-232C) Communication*3	
USB Communication Time	When downloading 1 Unit of full data: about 8 seconds	
Dimensions / Weight of Main Unit	H55 × W78 × D18mm / about 62g (including one AA battery)	
Operating Environment	Temperature: -10 to 60°C / Humfidity: 90%RH or less (no condensation)	
Attached Sensor*1	HHA-3151 × 1	
Accessories included in package	AA Alkaline Battery (LR6) × 1, USB Communication Cable (US-15C) × 1, User's Manual (Warranty) × 2, Software Set × 1	
Compatible OS	Windows® 7 / Windows Vista® / Windows® XP (SP1 or above) / Windows® 2000 (SP3 or above)*4	

*1: Yearly Change in Measurement Accuracy is 1% RH and 0.1°C per year.
*2: Battery life varies depending upon the quality of the battery, the measuring environment and the recording interval.
*3: If necessary, serial communication can be established by using our TR-77Ui communication protocol (contact your local dealer) to write a software program.
*4: It is necessary to have Administrator rights to install the software. T&D does not guarantee operation using a 64-bit OS. For the browser please use Microsoft Internet Explorer 5.01 or higher.
*5: When used at temperature / humidity equal to or lower than the following: 50°C/75%RH, 60°C/50%RH, 70°C/35%RH, 80°C/25%RH.
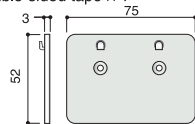
Options   unit : millimeters
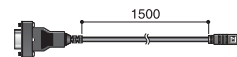
Wall Attachment: TR-07K2   Materials: Polycarbonate
■Included: Screw × 2 Double-sided tape × 1
3 75 52
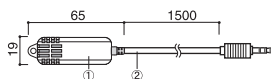
Temperature/Humidity Sensor: HHA-3151 (for TR-77Ui)
■Cable Length: 1.5m
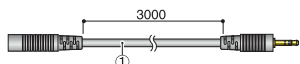■Sensor Response Time: About 21 minutes (90%)
65 1500 19
Materials: ①Polycarbonate ②Vinyl Coated Electrical Wire

*Sensor Extension Cable:TR-1C30   Materials: ①Vinyl Coated Electrical Wire
■Cable Length: 3m ■Temperature Durability: -25 to 60°C
3000 ①
*It is possible to use up to three extension cables per sensor.

Serial Communication Cable: TR-07C
■Cable Length: 1.5m
1500

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