Thermo Recorder

おんどとりHi

Measures and Records Temperatures from

−200 to 600℃
−328 to 1112℉

By connecting the TR−81 to a platinum resistance sensor (Pt 100) you can easily and accurately measure and record temperatures of a wide range. Each product comes with our exclusive software that allows you to not only download and save all of the data, but lets you create colorful graphs and tables with ease.

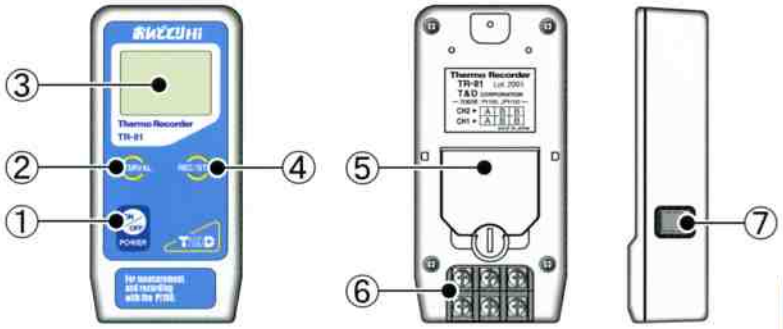
Pt100

T&D CORPORATION

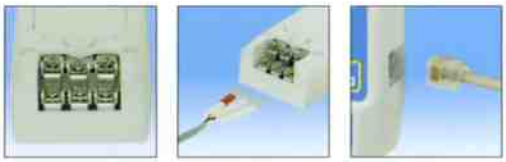
Pt100−based type TR-81

Measure and Record Temperature.
Transfer Data to Computer to make Graphs and Tables.

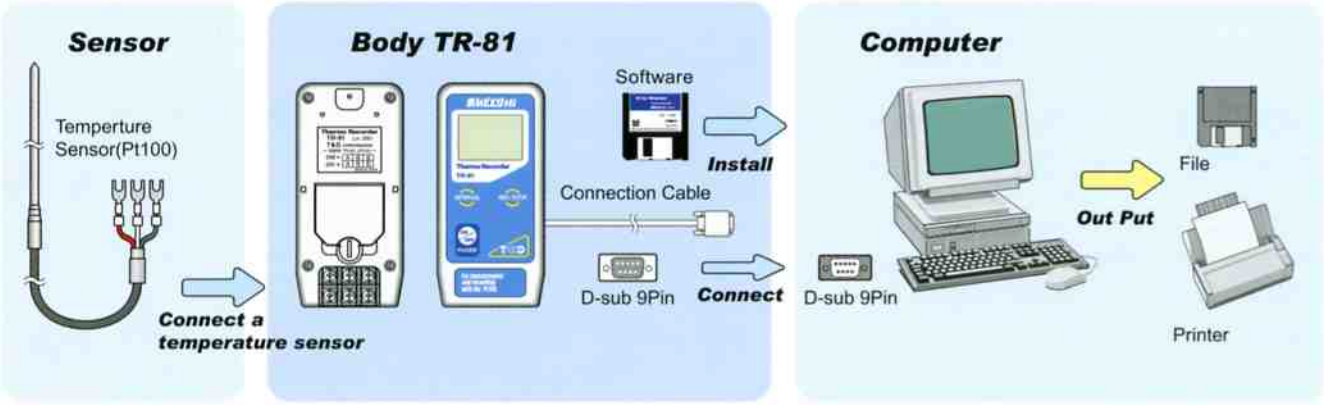
Product Parts



① Power switch
② Interval switch
③ REC/STOP switch
④ LCD Display
⑤ Lid for battery
⑥ Sensor connector
⑦ Connector for serial communication



System Setup

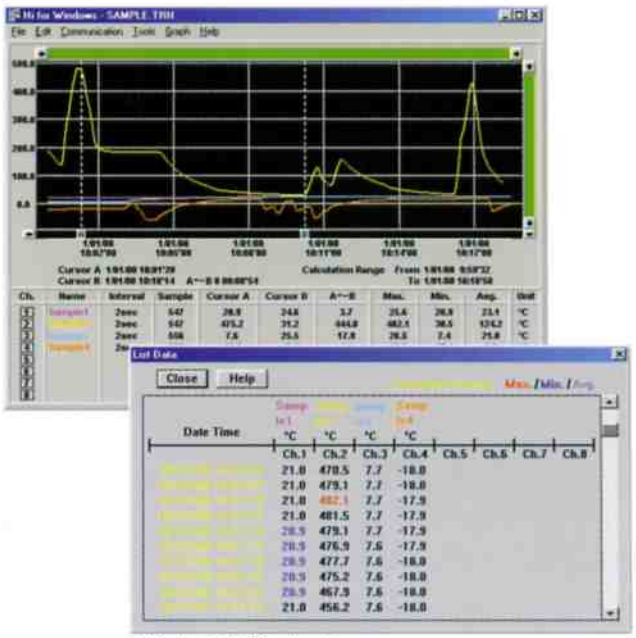


Software Included

The included software is a part of the highly functional yet easy to use software line that has grown out of our ONDOTORI Series. It brings you 8 data management channels that not only allow you to zoom in and out on any particular data field, but also give you the freedom to create colorful graphs at will. Each channel displays the highest temp., lowest temp. and calculates the average reading for any chosen data group. With this software you can also view data in table form as well as output it into text file form to be used with any popular spreadsheet software on the market today.

Hi for Windows®

< Main Graph Display >



< Data List Display >

Thermo Recorder

TR-81 can not only Measure from -200 to 600 but is also adaptable to all Three Wired Platinum Resistance Sensors.

TR -81 can measure temperature with any Pt100 type sensor with three wires or can be connected to already installed sensors. It has various uses from personal to business.

TR-81 has 2 Channels and can be Set at 15 Different Recording Intervals.

One TR-81 can measure and record on 2 channels.
Recording intervals can be selected from 1 second to 60 minutes.

Capacity for 8000 x 2 Channels.

TR-81 can record up to 8000 data readings on each of 2 channels. Recording mode can be selected from one time mode or endless loop mode.

With one time mode , recording stops when data reaches 8000 readings.
With endless loop mode, old data will be overwritten with new data when data exceeds 8000 readings.

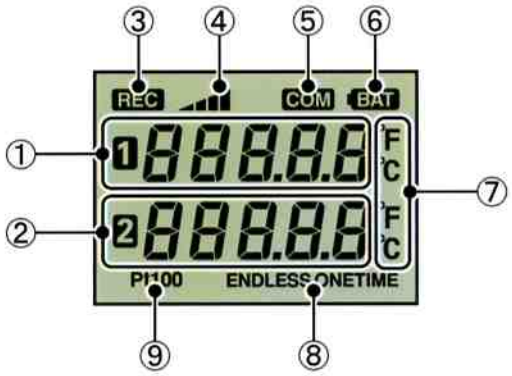
TR-81 can Run Continuously for 5 to 8 Months on One Battery and has Data Saving Back-up Function.

With just one lithium battery , the TR-81 can record data for 5 to 8 months continuously. In case the battery power drops the TR-81 will display a warning lamp and continue to store recorded data with its back-up function.

Caution: Battery life may vary depending on measuring environment, recording frequency, communication frequency, and environmental temperature. Data in this document is based on typical conditions with a new battery and is only for your reference. This is no guarantee of battery life under any conditions.

Easy-to-View, Full Function Display.

On the display you can find a variety of information e.g. temperature measurements, amount of recorded data, recording mode, battery warning, and temperature warnings.



① Displays Data Measurement for Channel 1
② Displays Data Measurement for Channel 2
③ Recording Indicator displayed when recording. Blinks when on Stand-by
④ Indicates Amount of Recorded Data
⑤ Indicates communication in progress.
⑥ Battery Life Warning is displayed whenever the battery power is low. Please change the battery as soon as you see the warning lamp come on. A backup function allows for measuring and recording to take place for a short time.
⑦ Displays the Unit of Measurement taking place. Unit can be changed via computer.
⑧ Indicates Measurement Mode (One Time / Endless). Mode can be changed via computer.
⑨ Sensor Type (Pt100)

Thermo Recorder

TR-81 Specifications

Measuring channels	2 channels
Range of measuring temperature	−200℃ (−328℉) to +600℃ (+1112℉)
Measuring accuracy	±0.3℃ (−200℃ (−328℉) to +80℃ (+176℉)) ±0.5℃ (+80℃ (+176℉) to +450℃ (+842℉)) ±1.0℃ (+450℃ (+842℉) to +600℃ (+1112℉))
Resolution	0.1℃
Specification of adaptable sensor	Pt100 with 3 wires
Measuring current	1mA
Recording method	One−time method or endless method
Recording interval	Select from 15 variations,1・2・5・10・15・20・and 30 seconds and・1・2・5・10・15・20・30・and 60 minutes.
LCD display	Measured data, Sensor mode, Recording mode, Battery life alarm, Amount of recorded data, Abnormal temperature
Recording data capacity	Up to 8000 readings each for 2 channels
Battery life	Typically from 5 to 8 months (Battery life depends on measuring environment, property of the battery)
Battery	One Lithium battery (CR−2)
Waterproof	Not Waterproof
Size of body	123mm (4.84inch) H × 58mm (2.28inch) W × 33mm (1.3inch) D dimension of flat area
Weight of body	132g (including battery)
Operating temperature	−10℃ (+14℉) to +60℃ (+140℉)
Accessory	① One Lithium battery ② One communication cable (RS−232C: D-Sub 9−pin 1.5m) ③ One set of software (Hi for Windows) ④ One attachment plate with screws ⑤ One user`s manual and warranty

Hi for Windows® Software Specifications

Compatible Device	Thermo recorder TR−81
Compatible OS	Microsoft® Windows® 3.1 / 95 / 98 Japanese/English Microsoft® WindowsNT® 4.0 Japanese/English
Compatible Computers	Any computer capable of running the above OS with a Serial Port (RS−232C)
Required Memory	16MB or above
Hard Disk Space	At least 1MB (Data will require more space)
Number of Channels	8 Simultaneously Displayed Channels
File Types	Thermo Recorder Specific Type (Can set Data Field) and Text File Type
Printing	Graphs (Color / Mono), Data List
Graph Display	Zoom In / Out, Scroll, Color Setting, Channel Display ON / OFF
Data Display	Graph, Table, High and Low Temp., Average Temp., Recording Interval, Amount of Data Recorded
Communication Functions	Recording Settings [Start (Immediate / Programmed), Recording Interval, Recording Mode, Unit of Measurement]
Others	Data Maintenance, Desired Calculating Range Setting, Calculation of Difference in Temperature between any two readin Data Delete, Data Re-arrange, and Data Display ON / OFF for Each Channel, Temperature Unit Change (℃⇔℉)

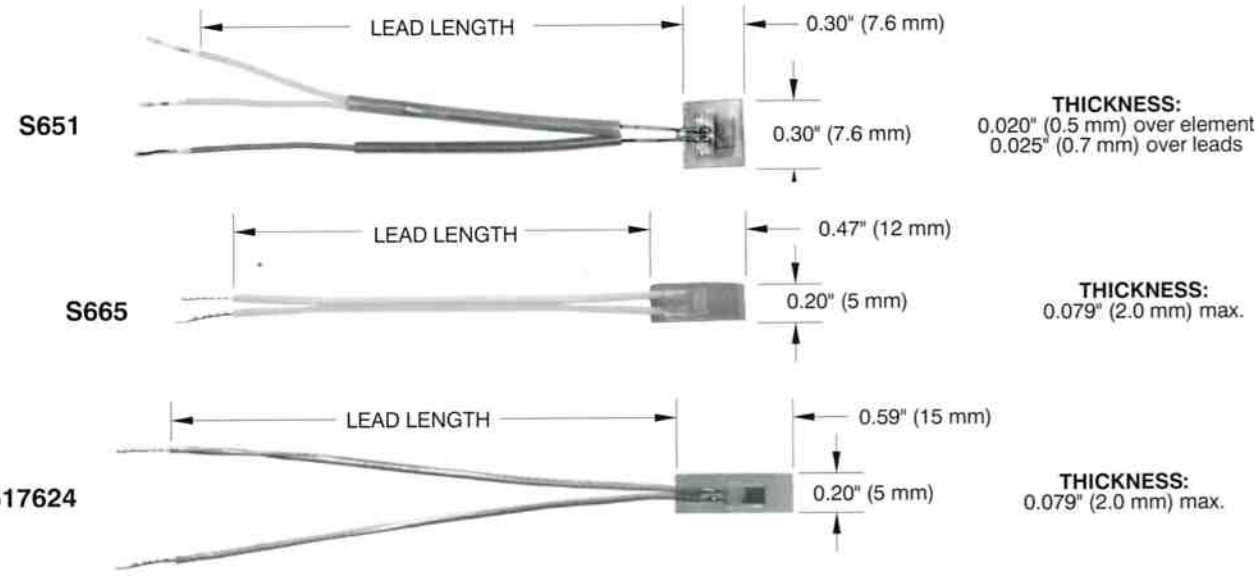
Internet information services
Products information, FAQ and downloading update software, etc.

Homepage address ● http://www. tecpel.com

⚠ Caution regarding safety

Carefully read these instructions before using this unit for safe operation.

TECPEL®
電子儀器
泰菱有限公司
台北市110崇德街31巷5弄13號1樓
TEL:(02)2737-5866 FAX:(02)2737-3343
http:// www.oka.com.tw http://www.tecpel.com.tw
E-mail:sales@tecpel.com



RTD Thermal-Ribbons

Model	Element	TCR Ω/Ω/°C	Insulation	Temperature range	Leadwires	Time constant (moving water)
S651PD	Platinum, 100 Ω±0.12% at 0°C (Meets IEC 751)	0.00385	Kapton, aluminum foil backing	-200 to 200°C -328 to 392°F	AWG 28, Teflon insulated	0.15 sec.
S665PD	Platinum, 100 Ω ±0.12% at 0°C (Meets IEC 751)	0.00385	Kapton with elastomer cover coat	-50 to 130°C -58 to 266°F	AWG 26, Teflon insulated	0.8 sec.
S665PF	Platinum, 1,000 Ω ±0.12% at 0°C					
S17624PD	Platinum, 100 Ω ±0.12% at 0°C (Meets IEC 751)	0.00385	Kapton	-50 to 200°C -58 to 392°F	AWG 26, Teflon insulated	1.00 sec.
S17624PF	Platinum, 1,000 Ω ±0.12% at 0°C					
S17624PS	Platinum, 10,000 Ω ±0.12% at 0°C					

Install these compact Thermal-Ribbons anywhere for accurate point sensing and fast response.

Models S665 and S17624 use a thin-film RTD element, model S651 a wire-wound element. All three models conform to IEC 751 Class B.

How to order

S651PD	**Model number**
Z	**Leads:** Y = 2 leads Z = 3 leads X = 4 leads
24	**Lead length in inches** S651: 24" stocked S665: 40" stocked S17624: 40" stocked
A	**Adhesive backing:** A = No adhesive B = Pressure-sensitive adhesive (PSA)*

S651PDZ24A ← Sample P/N

* PSA reduces temperature range to -20 to 177°C (-4 to 350°F) and adds 0.005" (0.1 mm) to thickness.

IN STOCK

All models