TECPEL®
Propel Quality Measurement.

TES-1160

Thermo Hygro Barometic Air Pressure Meter

Features

- Comparator function
- Alarm output function
- Auto power off function
- Read lock function
- Manual data memory and read function
- Automatic Data Logging Function (1161)
- USB interface (1161)
- 3 groups of LCD display temperature, relative humidity, and atmospheric pressure
- Dew point and wet bulb temperature calculation value reading
- Absolute humidity, mixing ratio, and enthalpy calculation value reading
- Read the calculated value of water vapor pressure and saturated water vapor pressure
- Atmospheric pressure trend (P3h) calculated value reading
- Read heat index (Heat Index) and humidity index (Humidex) calculated value
- Maximum value, minimum value with stamp of occurrence time

Measurement Gear	Relative humidity 0% ~ 100%R.H. Temperature -40°C~ +100°C (-40°F to +212°F)
Atmospheric pressure	300 ~ 1200hPa
Resolution	0.1% R.H., 0.1°C, 0.1°F, 0.1hPa
Accuracy	Temperature: ±0.4°C (+5°C~ +60°C) ±0.8°C (-20°C~ 5°C and +60°C~ +80°C) ±1.2°C (-40°C~ -20°C and +80°C~ +100°C) ±0.8°F(+41°F~ +140°F) ±1.6°F(-4°F~ 41°F and +140°F~ +176°F) ±2.4°F(-40°F~ -4°F and +176°F~ +212°F)
Relative humidity	±3%RH (25°C, 20 ~ 80% RH) ±4%RH (25°C, 10 ~ 20% RH and 80 ~ 90% RH) ±5%RH (25°C, 0 ~ 10% RH and 90 ~ 100% RH)
Atmospheric pressure	±2hPa (25°C), ±4hPa (-20 ~ 85°C)
Reaction time	Relative humidity: t63% < 10s (33 ~ 75% RH) Temperature: t63% < 10s (15°C ~ 45°C)
Sampling rate	1 time per second
Manual data memory capacity	99 groups (can be read directly on LCD)
Automatic Data Recording Capacity	microSD CARD 4GB (1161)
Alarm output	Open collector output, input impedance: 490Ω
Maximum Applied Voltage	24V DC
Maximum drive current	50mA DC
Operating temperature and humidity	0°C~60°C, less than 95% R.H.
Storage temperature and humidity	-10°C~ 60°C, less than 70% R.H.
Power supply	006P 9V or IEC6F22, NEDA 1604 battery
Battery Life	About 2 months
Size	249 x 64 x 26mm
Weight	About 178g
Appendix	Manual, battery, leather case, CD-ROM software (1161), Micro-USB cable (1161).
Optional accessories	AC Converter DC9V (1161)

TECPEL®
Propel Quality Measurement.

DTM-800
Digital Thermometer

The Tepcel® DTM-800 is a portable digital thermometer that is constructed in a handheld lightweight framework. This device can deliver optimum accuracy in every operation through its various functions. These functions include MAX / DATA HOLD, automatic power off, as well as °C and °F data units. In addition, it is in strict compliance to CE certification.

DTM-800 uses K-type thermocouple probes with pocket-size easily to carry out. Easily to have self recalibration adjust for zero and 100 deg C calibration by ice water and boiling water.

Specifications

Measuring Range	**-100~850°C (-148~1,562°F)**
Accuracy	**±(0.3% + 1°C)**
Resolution	**0.1°C / 1°C(When over 200°C)**
Auto Shut Off	**30 minutes**
Type of Thermocouple	**K-Type**
Reacting time	**According to the sensor**
Working Environment	**0~50°C / lower than 90%RH without dew**
Storage Environment	**-10~40°C / lower than 70%RH without dew**
Elevation Limitation	**Lower than 1,000 meters**
Power Supply	**1.5V Battery (AAA) x 3**
Dimension	**148 x 48 x 24 mm**
Weight	**73.4 g**
Accessory	**TPK-01*1, Battery, Manual.**

TECPEL®
Propel Quality Measurement.

TR-71nw, TR-72nw, TR-72nw-S

T&D Wired LAN Temperature and Humidity Data Logger

A new LAN-based data logger for cloud storage. In addition to the existing wireless LAN model TR-71wf/72wf, we added the wired-LAN model with the same basic features to offer a choice of network connection methods.

By using T&D WebStorage Service*1, a cloud service provided by T&D free of charge, it is possible to access stored data from your PC and mobile devices anytime from anywhere. Simply connect the data logger to the Internet with a LAN cable, and it automatically*2 starts uploading recorded data to T&D WebStorage Service, thus providing a remote access solution without the need for manual intervention.

1: Internet access via LAN is required to access T&D WebStorage Service.
2: In the LAN environment where DHCP can be used.

Features

- Automatic Upload of Recorded Data to T&D WebStorage Service via Wired LAN
- Temp/Humidity Alarm Mail Transmission from T&D WebStorage Service
- Direct Data Download via USB
- Temperature and Humidity Measurement in a Wider Range with Greater Accuracy (TR-72nw-H)
- Battery Operation for up to 1.5 years with one AA Alkaline Battery
- Automatic Upload of Recorded Data to PC

	TR-71nw	TR-72nw	TR-72nw-H
Supplied Sensors	TR-0106 (2ch)	THA-3001	HHA-3151
Temperature Measurement Range (°C)	-40 to 110	0 to 55	-30 to 80
Humidity Measurement Range (%)	—	10 to 95	0 to 99
Temperature Measurement Accuracy	±0.3°C [-20 to 80°C] ±0.5°C [at all other temperatures]	±0.5°C	±0.3°C [0 to 50°C] ±0.5°C [at all other temperatures]
Humidity Measurement Accuracy	—	±5%RH (at 25°C, 50%RH)	±2.5%RH (at 25°C, 10 to 85%RH)

TECPEL®
Propel Quality Measurement.

TR-51i TR-52i

T&D Thermo Recorder

The compact design allows the user to place a TR-5i Data Logger almost anywhere without worrying about space. Also, its durable body with waterproof and dustproof capacity makes it possible to be used in harsh environments.

Measurement Item	Temperature	Temperature
Measurement Channels	1 Ch (Internal Sensor Type)	1 Ch (External Sensor type)
Measurement Range	-40 to 80°C	60 to 155°C
Response Time (in 90% still air)	About 35 min.	
Measurement Accuracy	Avg. ±0.5°C	Avg. ±0.3°C: -20 to 80°C Avg.±0.5°C: -40 to -20°C/ 80 to 110°C Avg. ±1.0°C: -60 to -40°C/ 110 to 155°C
Measurement Display Resolution	0.1°C	
Logging Capacity	16,000 Readings	
Recording Start Method	Immediate / Programmed	
Recording Mordes	Endless / One Time	
Recording Interval	Select from 1,2,5,10,15,20 and 30 sec. / 1,2,5,10,15,20,30 and 60 min.	
LCD Displayed Items	Measured Temperature, Recording Status, Recording Mode, Infrared Communication Status, Battery Life Warning, Unit of Measurement, Full(Storage Capacity FULL), Unconnected Sensor, Measurement Range Exceeded, Upper/Lower Limit Exceeded	
Communication Interfaces	Optical Communication / Infrared Communication	
Infrared Communication	IrPHY 1.2 low power	
Communication Time	When downloading 1 Unit at full logging capacity: Optical Communication: About 24 sec. (TR-57DCi), About 20 sec. (TR-50U), About 160 sec. (TR-57U), Infrared Communication: About 55 sec. (TR-57DCi)	
Power (*1)	Lithium battery LS14250 x 1 (Lithium battery CR2 also okay)	
Battery Life (*2)	Maximum 4 years (2 years if it's been selected to "Permit" infrared communication)	
Waterproof Capacity	IP67 (Immersion proof)	IP64 (Splash resistant)
External Dimensions	H62mm x W47mm x D19mm (Excluding protrusions and External Sensor)	
Weight	About. 54g including battery	About. 55g including battery/ excluding sensor
Operating Environment	-40 to 80°C When using Lithium Batteries (CR2) sold in stores: -20 to 60°C	
Data Collection Devices	Communication Port: TR-50U Data Collectors: TR-57DCi, TR-57U, RTR-57U	

TECPEL®
Propel Quality Measurement.

TR-31, TR-32

Temperature Logger TR-31 / Temperature Humidity Logger TR-32

TR-31/32 series has USB interface, featuring elegant appearance and compact construction design for 9Nefrigerator , cold-chain transportation, and container transportation monitoring applications. TR-31/32 adopts user-friendly USB interface, easy-to-mount brackets with screws. The OK key can help the user check the Max/Min/Current values and the upper and lower limits.

Application Examples

- Cool and frozen transportation and storage
- Frozen transportation and storage
- Monitoring temperature during food transportation
- Performance testing of air conditioning equipment
- Recording temperature of instrumentation and machinery

TR-31 Specifications

Temperature Measurement	**-30 to 70 ° C**
Measurement Accuracy	**+/- 0.5 ° C**
Average	**+/- 0.5 ° C (-20 to 70 ° C)**
Measurement Resolution Display	**0.1 ° C**
Sensor Thermistor	

TR-32 Specifications

Measurement: Temperature Humidity	**Temperature: -30 to 70 °C** **Humidity: 0 to 100 %RH**
Measurement Accuracy	**(Standard Sensor) Average +/-0.5° C(-20 to 70 ° C)** **Average +/- 0.5 °C ; +/- 5%RH (At 25 ° C 50%RH)**
Measurement Resolution Display	**0.1° C , 1%RH (TR-32)**
Sensor Thermistor Macromolecular	
High Sensitve Humidity Sensor	

TECPEL®
Propel Quality Measurement.

TR-71wb,TR-72wb , TR-72wb-S

Temperature and Humidity Data Logger Wireless WiFi TandD

The most distinguishing feature of TR-71wb/72wb is its auto upload function which automatically uploads recorded data from the logger to our free cloud service. It enables the viewing of uploaded data on your mobile device or PC anytime, anywhere. Try our new data loggers and take a step into the new world of cloud storage

Application Examples

- Performance Testing of Humidity and Heat Control in Housing
- For Managing Temperature and Humidity in Server Rooms
- For Temperature and Humidity Management in Hospitals, Museums, and Temperature Controlled Warehouses
- Management of Temperature and Humidity in Subway and Train Cars

Measurement Specification

Measuring Range	: -20~70 ±0.3 °C [Sensor:SHA-3151]
Humidity Range	: 10~95 %RH ±2.5 %RH [Sensor:SHA-3151]
Temperature Unit	: °C / °F
Humidity Unit	: %RH (Relative Humidity)
Accuracy	: ±0.3 °C / ±5 %RH
Resolution	: 0.1 °C / 1 %RH

Features

Temperature Unit Selectable: °c / °f
Data Transmission: Network / Usb
Low Battery Indicator
Memory Usage Indicator
Data Logging: 8,000
Recording Mode: Onetime / Endless
Recording Interval Setup:
1 Sec. ~ 60 Minutes(15 Choices)
Uploading Interval Setup:
1 Minute ~ 24hours (15 Choices)
Capable Of Changing Different Probes
Cloud Service : Tandd Web Storage
Alarm: E-mail

Working Environment	: 0~50°c / Lower Than 90%rh Without Dew。
Storage Environment	: -10~40°c / Lower Than 70%rh Without Dew。
Elevation Limitation	: Lower Than 1,000 Meters
Wireless Specification	: Ieee 802.11b/g/n (2.4ghz Only)
Bluetooth	: Bluetooth 4.2 (Bluetooth Low Energy)
Dimension	: 58mm × 78mm × 26mm
Weight	: Approx. 55 G (Without Battery)
Accessory	: Aa Battery X2、sha-3151、usb Line (Mini-b Cable Us-15c)、manual

TECPEL®
Propel Quality Measurement.

TR-73U

Temperature humidity and barometric pressure data logger

These handy Thermo Recorders measure and record temperature and humidity. The recorded data is then downloaded to your computer via our exclusive software whereby colorful graphs and tables can be easily created.
By making use of two alkaline batteries this low energy using compact lightweight unit can be left alone to record continuously over long periods of time. And with our exclusive circuitry we have created a model that brings you the accuracy of more expensive models at a price you can afford.

Specifications

Measurement Channels	Temperature 1ch	Humidity 1ch	Barometric Pressure 1ch
Sensor	TR-3100 (External)	Polymer Resistance	Barometric Pressure Sensor (Internal)
Measurement Units	°C, °F	%RH	hPa
Accuracy	Avg. ± 0.3°C at 0 to 50°C	±5 %RH at 25 °C, 50 %RH	±1.5 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), Battery Warning Mark, etc		
Communication Interfaces	USB Communication Serial Communication RS-232C		
Power	AA Alkaline Battery x 1		
Battery Life	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, Software CD-ROM, User's Manual Set (Warranty Included)		

TECPEL®
Propel Quality Measurement.

TR-74Ui-S

TR-74Ui-S T&D Accumulating Light, Humidity and Temperature Data Logger

The TR-74Ui Illuminance UV Recorder is a data logger designed to simultaneously measure and record four items: Illuminance, Ultraviolet Light (UV), Temperature and Humidity. In addition to these, the TR-74Ui is also capable of displaying Cumulative Illuminance and Cumulative Amount of Ultraviolet Light in the LCD display. From dim moonlight to the summer sun, Illuminance can be measured within a wide range. The product is an all-in-one package that includes the data logger unit, sensors and software. We offer two types of packages with different temperature/humidity sensors depending on your required measurement range and accuracy needs. Simply by connecting to a PC via a USB connection and carrying out a few easy steps, the measurement and recording of data can be started. Not only can recorded data be easily downloaded to a PC via USB communication, but it can also be collected from data loggers via infrared communication to our T&D Data Collector TR-57DCi (sold separately). The TR-57DCi enables the user to gather and check recorded data on the spot without having to manually gather the data loggers.

Application Examples

- In art museums and other exhibit forums to manage illuminosity and help prevent deterioration of exhibits
- Management during all aspects of plant and food production
- For use in the development, testing, manufacture and sales of products for cutting UV rays
- UV reduction management in schools from kindergartens to universities
- For home and office use in the management or illuminosity and UV rays
- Design and management of homes and architectural buildings
- For managing the reduction of UV rays at swimming pools, the ocean, mountains and in parks
- For management and adjustment of illuminosity for photography and film
- For management in the production, storage and sales of foodstuffs and beverages
- For use at supermarkets, convenience stores and drugstores in UV product sales promotion materials

Features

- Measure and Record Illuminance, Ultraviolet Light (UV), Temperature and Humidity
- Temperature/Humidity Sensor Selection
- View Cumulative Illuminance and Cumulative Amount of Ultraviolet Light in LCD Display
- Measure Illuminance within Wide Range
- View and record Illuminance in Resolutions to 0.01 lx
- Simultaneously View Four Measurement in One Easy-to-Read Graph
- Large Logging Capacity: 8,000 Data Sets
- Transmit Recorded Data to PC via USB Connection

TECPEL®
Propel Quality Measurement.

TR-76Ui

T&D CO2 Temperature, humidity and CO2 data logger with built-in sensors

Temperature, humidity and CO2 data logger with built-in sensors
The ""CO2 Recorder TR-76Ui"" is a three-channel data logger designed to simultaneously measure and record CO2 concentration, temperature and humidity. Making atmospheric pressure settings for the measurement location ensures more stable and accurate CO2 measurements. The supplied software enables the user to download data recorded by TR-76Ui to PC via USB connection, whereby data from all three channels can be simultaneously viewed in graph or table form.

The product is an all-in-one package that includes the data logger unit, sensors and software. We offer two types of packages with different temperature/humidity sensors depending on your required measurement ange and accuracy needs.

By using a Data Collector TR-57DCi (sold separately), it will be possible to collect recorded data from the TR-76Ui via infrared communication and immediately check the collected data on the spot. TR-76Ui support on the TR-57DCi is planned for release at the end of February 2012.

This versatile data logger can be used in a wide range of applications from personal to business use; for measurements of home environment, CO2 measurements in offices and other buildings, and/or energy-saving measures such as ventilation and air conditioning controls.

Application Examples

- Managing CO2, temperature and humidity in schools: from kindergartens to universities
- For home and office use in the management of CO2 concentration, temperature and humidity
- For energy-saving measures such as ventilation and air conditioning controls
- For research studies on photosynthesis and plant growth
- To use in estimations of ventilation

Standard Kit

- TR-76Ui
- Manuals
- AAA Alkaline Battery x 4
- AC Adaptor (AD-0638) or
- AC Adaptor (AD-0638-C)
- USB Communication Cable (US-15C)
- Software
- CD-ROM
- Temperature/Humidity Sensor (THA-3001/HHA-3151)

TECPEL®
Propel Quality Measurement.

TRH-3308A

Temperature Humidity meter LED Monitor with Data logger

- Complete environmental monitoring and alarm solution
- Wall-Mounted LED type for easy reading
- Alarm set for CO2 (TRH-3358A) and Temperature and Humidity
- USB Datalogging Capacity 65,000 records
- Real-time data display

Applications

- Warehouses - Hospitals blood/Tissue banks.
- Laboratories - Computer rooms.
- Chambers/incubator - Clean rooms.
- Electronics manufacturing - Defense.
- Refrigerators/Freezers - Other Critical areas.

Specifications

Sampling time	**1 time/second**
Interval time	**1s~24hrs**
Output interface	**RS485/RS-232/USB With a time of three options**
Analog output	**4-20mA Output (RL<=250Ω)**
Dry contact (Relay Switch)	**Contact:Max. 1A@30Vdc Resistive load**
Power	**24Vac/Vdc±20%(50…60Hz)and 9-15V Adaptor**
Power consumption	**6W@24Vdc**

Type	**Diode**
Range	**-20°C~70°C/-4°F~158°F**
Accuracy	**±1.0°C (5~60°C)other±2°C**
Resolution	**0.1°C/0.1°F (0~35°C/32°F~95°F); 1°C/1°F (over 100°C/°F or below-10°C/°F)**
Response Time	**Typ.1 second**

Type	**Capacitive**
Range	**5-95%**
Accuracy	**±5.0%RH (20~80%);±8.0%RH (80%)**
Resolution	**0.1%**
Response Time	**Typ.4 seconds**

TECPEL®
Propel Quality Measurement.

DTM-317
DTM-318
Digital Thermometer
USB Data Logger

The DTM-317 by Tecpel Co. is a hand-held temperature data logger which comes with an operating temperature of -200°C ~ 1,370°C (-328°F ~ 2,498°F). For data logging capacity, it can log about 16,000 records which can be easily seen through its 4 digit LCD that has a timer display.

Features

DTM-317

- -200°C ~ 1,370°C (-328°F ~ 2,498°F)
- Data Logging capacity 16,000 records.
- 4 Digit LCD, Triple display.
- Timer display.
- Recording interval setup.
- Reading hold °C or °F annunciators.
- Single K-type thermocouple input.
- MAX, MIN. function.
- Auto Power off.
- Hold, ΔREL functions.
- Automatic low battery indication.
- High resolution 0.1°C, 0.1°F
- RS-232 Computer interface.
- USB cable (optional)
- Software program for Windows

DTM-318

- -200°C ~ 1,370°C (-328°F ~ 2,498°F)
- Data Logging capacity 16,000 records.
- 4 Digit LCD, Triple display.
- Timer display button.
- Recording interval set up.
- Reading hold °C or °F annunciators.
- Dual K-type thermocouple inputs.
- MAX, MIN. function.
- Auto Power off.
- Hold functions.
- Automatic low battery indication.
- High resolution 0.1°C, 0.1°F
- RS-232 Computer interface.
- USB cable (Optional)
- Software program for Windows.

TECPEL®
Propel Quality Measurement.

DTM-319A

4-channel K. J. E. T. Type Thermocouple Temperature Data Logger thermo recorder

The 4 - Input Digital Thermometer DTM-319A is a battery-powered K, J, E, T Type temperature data logger with sensor already built inside the device. For sure, the product is a compact, which is easy for users to carry it everywhere. Furthermore, it is a practical device without difficult manipulation skills needed; customers can use this data logger in an efficient way. Last but not least, the item can measure temperature from -200°C ~ 1,372°C, which is ideal for all applications, especially in some circumstances requiring precise operation and measurement.

The temperature data logger is equipped with numerous advantages, which also make the device more convenient for users to operate. As we move on to the professional era, our continuing support through high quality standards and services for our customers worldwide will remain. To boost your business, choose TECPEL as your reliable and promising partner.

Features

- Temperature: K: -200°C ~ 1,370°C (-328°F ~ 2,498°F)
- Isolated input Protection up to 250V AC between two inputs.
- Data Logging capacity 16,000 records for each channel.
- 4 Digit LCD display for every tested point.
- Recording interval set up.
- Reading hold °C or °F annunciators.
- 4-channel thermocouples can be used simultaneously & recorded.
- MAX, MIN. Function
- Auto Power off
- Hold functions.
- Automatic low battery indication.
- High resolution 0.1°C, 0.1°F
- USB Computer interface.
- Software program for Windows.
- Standard Tripod mount connector

General Specifications
- Power Requirement: 1 piece 9V battery
- Dimensions: 7.2" x 2.5"x 1.2" (184 x 64x 30mm)
- Weight: 7.4 oz(210g)
- Accessories: RS-232 cable and software for WINDOWS), Deluxe carrying case, English manual, TPK-01 bead probe x 2 pcs
- Option Accessory: AC adaptor(DC 9V), Special Type K thermocouples
- Certificate: CE

Measurement Range
-200°C ~ 1,370°C (-328°F ~ 2,498°F)
k: -200~ 1370 °C (-328 ~2501°F)
J: -150 ~1000 °C (-238 ~1832 °F)
E: -150 ~ 750 °C (-238 ~ 1382°F)
T: -180 ~ 400°C (-292~ 752°F)

Temperature Coefficient: 0.01% of reading +0.05 °C per °C (28°C).
Temperature scale: °C or °F user-selectable
Resolution : 0.1°C or 0.1°F< 1000 ° (>1000 ° , 1°C)
Sensor: K, J, E, T type Thermocouple probe
Sampling rate: 3 seconds per testing circle
Input Protection : 60V DC or 24V rms AC Maximum

Data Logger Accuracy
±(0.1% reading +0.7 °C); ±(0.1% reading +1.4 °F)
Below -100°C (-148°F) ±(0.4% reading + 0.7 °C (1.4 °F)

The above accuracy of DTM-319A is specified for ambient temperature between 18°C (64 °F) and 28°C (82°F).
The above specifications of DTM-319A do not include thermocouple sensor error.

TECPEL®
Propel Quality Measurement.

4 channels can use multiple K-type probes

DTM-319

DTM-319 4-channel Temperature Data Logger thermo recorder

The 4 - channel Digital Thermometer is a battery-powered temperature data logger with sensor already built inside the device. For sure, the product is a compact, which is easy for users to carry it everywhere. Furthermore, it is a practical device without difficult manipulation skills needed; customers can use this data logger in an efficient way. Last but not least, the item can measure temperature from -200°C ~ 1,370°C, which is ideal for all applications, especially in some circumstances requiring precise operation and measurement.

The temperature data logger is equipped with numerous advantages, which also make the device more convenient for users to operate. As we move on to the professional era, our continuing support through high quality standards and services for our customers worldwide will remain. To boost your business, choose TECPEL as your reliable and promising partner.

Features

- Temperature: -200°C ~ 1,370°C (-328°F ~ 2,498°F)
- Data Logging capacity 16,000 records for each channel.
- 4 Digit LCD display for every tested point.
- Recording interval set up.
- Reading hold °C or °F annunciators.
- 4-channel thermocouples can be used simultaneously and recorded.
- MAX, MIN. Function
- Auto Power off
- Hold functions.
- Automatic low battery indication.
- High resolution 0.1°C, 0.1°F
- RS-232 Computer interface.
- Software program for Windows.
- Standard Tripod mount connector
- Certificate: CE

A temperature logger with four channels, compatible with K type of thermocouples, with 4 K-type thermocouples, and with the software includes downloading the stored information to a PC and graphing it in Excel or directly with its software of the thermometer data logger.

Measurement Range: -200°C ~ 1,370°C (-328°F ~ 2,498°F)
Data Logger Accuracy :

-200 to 200 °C: ±(0.2% reading +1°C)
200 °C to 400°C : ±(0.5% reading +1°C)
400 °C to 1370°C: ±(0.2% reading +1°C)
-328°F to 200°F ±(0.5% reading +1°F)
-200 °F to 200 °F ±(0.2% reading +1°F)
200 °F to 2498 °F ±(0.3% reading +1°F)

Temperature scale: °C or °F user-selectable
Resolution : 0.1°C or 0.1°F (200 °C~1370°C, 1°C)
Sensor: K type Thermocouple probe
Sampling rate: 3 seconds per testing circle
Input Protection: 60V DC or 24V RMS AC Maximum

Power Requirement	**1 piece 9V battery**
Dimensions	**7.2" x 2.5" x 1.2" (184x64x30mm)**
Weight	**7.4 oz (210g)**
Certificate	**CE**
Accessories	**RS-232 cable and software for WINDOWS), Deluxe carrying case, owner manual, TPK- 01 bead probe x 2 pcs Option Accessory: AC adaptor(DC 9V), Special Type K thermocouples**

TECPEL®
Propel Quality Measurement.

DTM-321, DTM-322

Temperature and Humidity Meter

DTM-321: Dual Input.Temperature and humdity meter.
DTM-322: Dual Input + Data Recorder.+RS-232 interface (optional USB cable)

DTM-321

- Temp:-20°C ~ 60°C (-4°F ~ 140°F)
  K-type: -200°C ~ 1,370°C (-328°F ~ 2,498°F)
  Humidity: 0 ~ 100% RH
- 4 Digit, Triple display.
- K-type Termocouple.
- Reading hold °C or °F annunciators.
- MAX, MIN. function.
- Auto power off.
- ΔREL function.
- Automatic low battery indication.
- RS-232 computer interface.
- RS-232 cable and software for Windows (Options).

DTM-322

- Temp:-20°C ~ 60°C (-4°F ~ 140°F)
  K-type: -200°C ~ 1,370°C (-328°F ~ 2,498°F)
  Humidity: 0 ~ 100% RH
- Data Logging capacity 16,000 records.
- 4 Digit, Triple display.
- K-type Termocouple.
- Reading hold, °C or °F annunciators.
- MAX, MIN function.
- Auto power off.
- Time function.
- Automatic low battery indication.
- RS-232 computer interface.
- RS-232 cable and software for Windows.

Specifications

Measurement Range	T: -20 ~ 60 (-4 ~ 140) I T2: K-type:-200 ~ 1370 (-328 ~ 2498) Humidity: 0~100%RH, Accuracy ±2.5%RH
Accuracy	-20 ~ +60: T1:±0.7 -4 ~ 140 T1:±1.4 -200 ~ 1370: T2:±(0.3%rdg+1) typical -328 ~ 2498 T2:±(0.3%rdg+2) typical
Temperature Scale	Celsius or Fahrenheit user-selectable
Resolution: Humidity	0.1%RH;Temp.T1:0.1,0.1 T2:-200~200,0.1; 200 ~ 1370,1.
Sensor	K-type Thermocouple
Response Time (T1)	Humidity:75 sec. in slowly moving air
Temperature	40 sec. in slowly moving air
Input Protection	60V DC or 24V rms AC Maximum
General Power Requirement	1 piece 9V battery
Dimensions	Meter: 10.8" x 2.5" x 1.2" (186x64x30mm) I Probe: 7.5" x 0.6" (190x15mm)
Weight	11.2 oz(320g)
Accessories	1 x TPK-01,probe, 9V battery, Deluxe carrying case,owners manual, RS-232 cable & software for Windows

TECPEL®
Propel Quality Measurement.

DTM-301H

Large Display Thermometer Hygrometer

DTM-507 is an advanced thermocouple thermometer and thermometer recorder with high accuracy and complete functions. It can display thermocouple temperature signals from two sources at the same time, and can replace different types of thermocouple temperature probes according to the measurement needs of use.

Features

- T1, T2 for various thermocouple
- Triply display with set-able backlight
- Data logger function
- Save Data: 128 samples with real-time data
- Data Logger: 16 sets, Maximum 1024 data capacity
- T/C Offset Adjust
- REC, MAX, MIN, MAX-MIN, AVG, REL, HOLD functions
- T1, T2, T1-T2, Time and Memory No
- Resolution 0.1/1oC to 0.1/1oF
- Warning beeper with Hi/Lo setting
- TIME, REL, Record interval, APO time setting

Specifications

Thermocouple Range	**K-TYPE (0.1°, 1° for above 2000°F) -200°C to 1372°C, -328°F to 2501°F** **J-TYPE (0.1°, 1° for above 2000°F) -210°C to 1200°C, -346°F to 2192°F** **T-TYPE(0.1°) -200°C to 400°C, -328°F to 752°F** **E-TYPE(0.1°) -210°C to 1000°C, -346°F to 1832°F** **R-TYPE(1°) 0°C to 1767°C, 32°F to 3212°F** **S-TYPE(1°) 0°C to 1767°C, 32°F to 3212°F** **N-TYPE (0.1°, 1° for above 2000°F) -50°C to 1300°C, -58°F to 2372°F**
Accuracy	**K/J/T/E-TYPE** **±(0.05% rdg + 0.3°C) on -50°C to 1372°C** **±(0.05% rdg + 0.7°C) on -50°C to -210°C** **±(0.05% rdg + 0.6°F) on -58°F to 2501°F** **±(0.05% rdg + 1.4°F) on -58°Fto -346°F**
	N-TYPE **±(0.05% rdg + 0.8°C) on -50°C to 0°C** **±(0.05% rdg + 0.4°C) on 0°C to 1300°C** **±(0.05% rdg + 1.6°F) on -58°F to 32°F** **±(0.05% rdg + 0.8°F) on 32°F to 2372°F**
	R/S-TYPE **±(0.05% rdg + 2°C) on 0°C to 1767°C** **±(0.05% rdg + 4°F) on 32°F to 3212°F**

TECPEL®
Propel Quality Measurement.

DLM-536

Light Meter with Data Logger

The DLM-536 Series, manufactured by Tecpel is a data logging light meter equipped with RS-232 interface and software. It has dimensions of 146 x 70 x 39 mm, weight of 300 g, and operating temperature of 40 °C. It is used in applications involving industrial, commercial, photography, videography, construction, engineering, and security.

Features

- Spectrum of photo sensor meets C.I.E.
- Photopic curve V(l)
- 16000 Records Data logging capacity
- RS-232 interface (software included)
- Measurement of luminous intensity
- PC Software

Specifications

Measuring range	20/200/2000/20000 Lux , 20/200/2000/20000 Fc
Luminous intensity (cd)	Intensity = illuminance x (length)2
Length	feet (Fc) meter (Lux)
Resolution	0.01 Lux
Accuracy	±(3% rdg + 5dgts) (calibrated to standard incandescentlamp, 2856 K)
Overrang display	OL
Record (Data logging)	16000 Point Data logger
Sensor	Silicon photo diode
Sensor lead length	150cm (approx)
Sensor probe	100(L) x 60(W) x 27(H) mm
Dimensions / Weight	146(L) x 70(W) x 39(H) mm / 300g (approx)
Power source	One 9V battery
Battery life	50hrs (approx)
Operating Storage Condition	0 °C ~ 40 °C (32°F~104°F) below 80% RH -10°C ~ 60°C (14°F~140 °F) below 70% RH
Accessories	Carrying case, 9V battery,instruction manual, Software, RS-232 cable, 9 Pin to 25 Pin gender changer

TECPEL®
Propel Quality Measurement.

DSL-331

Programmable Sound Level Data Logger

Features

- Auto Ranging Measurement 30dB to 130dB
- Work with Window Software
- 32,000 Records Data Logger
- Bar graph Indication with Back Light
- RS-232 Real Time Display Software for Window 95/98/2000
- Frequency Weighting: A, C
- 4-Digit Display with updated cycle 0.5s
- 0.1dB resolution
- Max/Min Hold Function
- The standard Fast & Slow Time weightings
- Tripod Connection Hole Able to connect Camera Tripot Stand
- AC/DC signal output
- Overload condition indication
- Auxiliary output jack
- IEC 651 Type II, ANSI S1.4 Type2.
- Back screw hole tripod connection
- External Power DC 9V input
- Calibration Potentiometer easy to adjust

Specifications

Standard Applied	IEC651 Type 2, ANSI S1.4 Type 2
Frequency Range	31.5Hz ~ 8KHz
Measuring Level Range	30 ~ 130dB
Frequency Weighting	A/C
Microphone	1/2 inch electric condenser microphone Display
LCD	Back Light Function
Digital Display	4 digits
Resolution	0.1dB
Display Update	0.5 sec
Time Weighting	FAST (125mS); SLOW(1 Sec)
Accuracy	±1.5dB (under reference condition at 94dB 1KHz)
Dynamic Range	100 dB
Over and Under range Indication Function 'OVER' is displayed, while input is more than upper limit of range. ' UNDER' is displayed, while input is less than lower limit of range.	
MAX/MIN Hold	Hold Reading the Maximum and Minimum Value
AC Output	1V rms at FS (Full Scale), output impedance : Approx. 100 Ω
DC Output	10mV/dB, Output impedance approx. 1K Ω
Auto Power Off	30 minutes if no operation
Power Requirement	One piece 9V battery NEDA 1604 Power Life About 50 Hours (Alkaline battery)
Voltage	9VDC (8~ 15 V DC Max) ; Supply current : > 30mADC
Operation Temperature	0 to 40 °C (32 to 104 °F)
Operation Humidity	10 to 90% RH
Storage Humidity	10 to 75% RH
Weight	10 oz(285g)
Accessories	9V battery, Carrying case, calibration screwdriver, 3.5Ø plug, windscreen, manual.

TECPEL®
Propel Quality Measurement.

ZG-106
CO2 Monitor

The ZG106 is a new and low-cost carbon dioxide monitor implementing IR-SoC technology. Its many features include a data logger that can record up to 24 hours of data, a CO2 level alarm, and an extreme level indicator.

The ZG106 accurately detects carbon dioxide levels between 0 to 3000 ppm. By using an in-house ASIC design, Tecpel has created a CO2 monitor that has an extremely low parts count, attributing to the low cost of the ZG106.

This gas monitor is suitably fit for applications in Indoor Air Quality(IAQ), HVAC, safety, other industries.

Features

- Ultra low cost CO2 Monitor achieved by New IR-SoC Technology .
- It uses NDIR technology to improve the long term stability.
- Portable, accurate handheld CO2 Monitor.
- The Alarm mode will sound at 1000 PPM or adjust the alarm level
- Max/Min mode

Specifications

Measuring Range	0-3,000 ppm display
Display Resolution	1ppm at 0~1,000ppm / 5ppm at 1,000~2,000ppm 10ppm at 2,000~3,000ppm
Accuracy	±50 ppm or ±5% of reading
Repeatability	±20 ppm
Temperature Dependence	±0.1% of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C
Pressure Dependence	0.13% of reading per mm Hg (Corrected via user input for altitude)
Calibration	Interval 12 months, offset adjustment using single gas at 0-1000 ppm CO2. Full factory calibration available.
Measuring Range Display	32 to 122°F (0 to 50°C)
Display Resolution	0.1°F (0.1°C)
Display Options	°F / °C, or Off. Set with Up / Down