

RH520A Humidity+Temperature Chart Recorder

Best value graphical datalogger in the market that's easy to set up and operate



Features:

- Simultaneous numerical & graphical display of Humidity and Temperature readings, plus Time and Date
- Large dual graphical LCD displays with adjustable vertical and horizontal resolution indicate % of memory remaining
- Internal memory records up to 49,000 data points can be transferred to a PC
- Detachable probe extends to 3ft (1m)
- Audible and visual alarm with Hi/Low setpoints
- Output socket used with optional external alarm module
- Complete with built-in stand, detachable probe with 3ft (1m) cable, RS232 cable, RS-232 to USB adaptor, LabView-based PC software, 100-240VAC 50/60Hz adaptor, and 3 AA batteries



Function	
Relative Humidity range	10.0 to 95.0%
Temperature range	-20.0 to 140.0°F (-28.0 to 60.0°C)
Basic Accuracy	±3% Relative Humidity; ±1.8°F (±1°C)
Dimensions	5 x 7.7 x 0.9" (129 x 195 x 22mm)
Weight	12.6oz (357g)

Ordering

- RH520AHumidity+Temperature Chart Recorder (110V adaptor)
- RH520A-NIST.RH520A with NIST Certificate
- RH520A-220Humidity+Temperature Chart Recorder (220V adaptor)
- RH520A-240Humidity+Temperature Chart Recorder (240V adaptor)
- RH522Replaceable Humidity/Temperature Probe
- SL123AC Alarm Relay Module 9ft (3m) cable
- SL124DC Alarm Relay Module 9ft (3m) cable



New LabView based PC software and cable for download control and to graph Relative Humidity, ambient temperature, dew point, wet bulb, and mix ratios (gpp or g/kg)



Wall mountable

RHT20 Humidity and Temperature Datalogger **NEW**

Datalogs 16,000 Humidity and 16,000 Temperature readings

Features:

- USB interface for easy setup and data download to a PC
- Dew point indication via Windows® compatible software (included)
- Selectable data sampling rate: 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr
- User-programmable alarm thresholds for RH and Temperature
- LCD displays current readings, Min/Max, and alarm status
- Long battery life (approx. 1 year)
- Complete with 3.6V Lithium battery, mounting bracket with combination lock, and Windows® 98, 2000, XP, and Vista compatible analysis software



Function	Range	Resolution	Basic Accuracy
Temperature	-40 to 158°F -40 to 70°C	0.1°F/°C	±1.8°F ±1.0°C
Humidity	0 to 100%RH	0.1%RH	±3%RH
Datalogging interval	1 second to 24 hours		
Memory	Temperature: 16,000 points; Relative Humidity: 16,000 points		
Dimensions	3.7 x 1.9 x 1.2" (94.4 x 48.9 x 31.2mm)		
Weight	3.2oz (90.7g)		



Monitors Humidity and Temperature levels in warehouse, storage rooms, freezers, shipping vans, and offices. USB connector easily plugs into a computer for data analysis.

Ordering (Available Q4 2009)

- RHT20Humidity and Temperature Datalogger

42265/42275 Temperature & Humidity Datalogger Kits

Choice of Temperature/Humidity or Temperature only Datalogger — Compact, powerful and easy to use with PC interface

Features:

- **42265** — Waterproof (IP65) Temperature Datalogger Kit records up to 8000 readings
- **42275** — Water resistant Temperature and Humidity Datalogger Kit records up to 16,000 readings (8,000 readings/parameter)
- Real time clock with date and time
- Logs data for days, weeks or months
- Three start methods: Scheduled, immediate or magnetic

- Multiple Dataloggers (42260 or 42270) can be programmed and data downloaded from one single docking station
- Programmable sampling rate from 1sec to 2hrs plus Hi/Lo limits with alarm indication

Datalogger Kit available in two configurations: **42265** includes one 42260 datalogger. **42275** includes one 42270 datalogger. Both include Windows® compatible software & docking station.



Specifications	Function	Range	Resolution	Basic Accuracy
	Relative Humidity	0 to 100% RH	0.1%RH	±3%RH
	Temperature	-40 to 185°F (-40 to 85°C)	0.1°F/°C	±1°F (±0.6°C)
	CE/ Warranty	CE/ 1 year		
	Dims/Wt	42260 or 42270 — 3x2.3x0.88" (76.2x57.2x22.3mm); 2.6oz (72.6g)		
		42265 or 42275 — 4.9x3.8x2" (123.8x95.3x51mm); 9oz (254g)		
		42266 or 42276 — 6.1x4.8x1.9" (155x122x48mm)/12oz (338g)		

Ordering

- 42275Temperature/Humidity Datalogger Kit with PC Interface
- 42270Temperature/Humidity Datalogger for 42275
- 42265Temperature Datalogger Kit with PC Interface
- 42260Temperature Datalogger for 42265
- 42299Replacement 3.6V Lithium batteries (2pk)
- USB100.....RS-232 to USB Adaptor

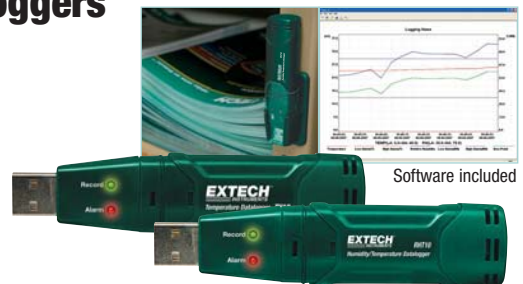
RHT10/TH10 Humidity & Temperature USB Dataloggers

Two models to choose from with USB interface for easy set-up and data download

Features:

- **Model RHT10** datalogs 16,000 Temperature/16,000 RH readings; Dew point indication via Windows® compatible software
- **RHT10-SW** software for RHT10 to calculate Grains Per Pound (grams per kilogram) to 1120GPP (160g/kg)
- **Model TH10** datalogs 32,000 Temperature readings
- Selectable data sampling rate: 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr

- User-programmable alarm thresholds for RH and Temperature
- Humidity: 0 to 100%RH (Model RHT10 only)
Temperature: -40 to 158°F (-40 to 70°C);
Accuracy: ±3%RH; ±1°F/0.5°C
- 1yr battery life; Dims: 5.1x1.1x0.9" (130x30x25mm)/Wt: 1oz (20g)



Complete with 3.6V Lithium battery, protective USB cap, mounting bracket, and Windows® compatible software for analysis

Ordering

- RHT10Humidity and Temperature USB Datalogger
- RHT10-SW.GPP (g/kg) Software for RHT10
- TH10Temperature USB Datalogger

42280 Temperature and Humidity Datalogger

Records up to 16,000 readings with USB interface for downloading to a PC

Features:

- Programmable from keypad or PC
- Selectable data sampling rate
- User programmable audible and visual alarms
- Wall, desktop, or tripod mount
- Calibration via optional salt bottles

Specifications	Function
	Relative Humidity range 0 to 100% RH
	Temperature range -4 to 144°F (-20 to 70°C)
	Resolution 0.1%RH, 0.1°F/°C
	Basic Accuracy ±3% Relative Humidity; ±1°F (±0.6°C)
	CE/ Warranty CE/ 1 year
	Dims/Wt 4.75x3.5x1.5" (120.7x88.9x38.1mm)/ 5.7oz (163g)



Software included



Complete with Windows® compatible software, USB cable, 110V AC adaptor, and four AA batteries

Ordering

- 42280.....Temperature and Humidity Datalogger
- RH300-CAL ..33% and 75%RH Calibration Kit



Digital Psychrometers

New humidity and temperature meters with built-in or remote probes include wet bulb and dew point measurements for quick assessment of air moisture content.

Featuring Model HD500

Built-in InfraRed Thermometer

30:1 IR Thermometer for fast and accurate non-contact surface temperature measurements

USB Interface and PC Software

Easy data transfer to a PC

Highest Accuracy

Precision 2% RH accuracy

Wet Bulb and Dew point

Digital Psychrometer displays air moisture content without slinging



Only Extech offers
Dew Point Meters with
Differential and IR Thermometer

Accessories

- RH300-CAL.....33% and 75%RH Calibration Kit for RH300
- RH350-CAL.....33% and 75%RH Calibration Kit for RH350
- RH401-CAL.....33% and 75%RH Calibration Kit for RH401
- TP890.....Thermistor Temperature Probe for RH300
- 407752.....PC Software and Cable for RH401 and RH405
- 589250.....RS-232 PC cable for RH350 and RH355
- USB100.....RS-232 to USB Adaptor

Order Meter with NIST Certificate*

All Extech meters come factory calibrated. For an additional charge, Extech will supply your meter complete with a Certificate of Calibration Traceable to N.I.S.T. with Data at multiple points. **To order meter with NIST:**

- RH300-NIST
- RH305-NIST
- RH350-NIST
- RH355-NIST
- RH390-NIST
- HD500-NIST
- HD550-NIST
- HD500-NISTL**
- HD550-NISTL**

*Only products listed are available with NIST Certificate. Meter must be ordered with NIST Certificate at time of purchase.

**Limited NIST: Product certified to all functions except IR Thermometer.

Specifications

Model	RH300	RH305 (kit)	RH350	RH355 (kit)
Sensor Type	Capacitance		Capacitance	
Dew Point	-90.4 to 122°F (-68.0 to 49.9°C)		-90.4 to 122°F (-68.0 to 49.9°C)	
Wet Bulb	-6.9 to 122°F (-21.6 to 49.9°C)		-6.9 to 122°F (-21.6 to 49.9°C)	
Humidity (Basic Accuracy)	0 to 100%RH (±3%RH)		0 to 100%RH (±3%RH)	
Temperature (internal)	-4 to 122°F (-20 to 50°C)		-4 to 122°F (-20 to 50°C)	
Basic Accuracy	±1.8°F or ±1°C		±1.8°F or ±1°C	
Temperature (external)	-4 to 158°F (-20 to 70°C)		-328 to 2498°F (-200 to 1370°C)	
Basic Accuracy	±1.8°F or ±1°C		±0.3% or 1.8°F or ±1°C	
Temperature (IR)	—		—	
Basic Accuracy	—		—	
Emissivity	—		—	
Field of View	—		—	
PC Interface	—		Optional	RS-232
Memory/Datalogging	—		99 readings	
CE/Warranty	CE/ 1 year		CE/ 1 year	
Dimensions/Weight	7x1.9x1" (178.5x48.4x24.7mm)/ 3.3oz (95g)		9x2.2x1.7" (230x57x44)/ 5.3oz (153g)	



RH305 Value Kit

RH300/RH305 Hygro-Thermometer Psychrometer

External Probe Temperature measurements for differential

- Simultaneous display of %RH, Temperature and Dew Point or Wet Bulb or Probe Temperature
- Calculates T1-T2 differential (Air Temperature minus External Probe Temperature) using optional probe (TP890) and T2-Dew Point
- Data Hold and Auto power off
- MAX/MIN readings
- Optional TP890 probe for Differential Temperature
- RH300 includes 2 AAA batteries
- RH305 kit (see photo on p. 85) includes RH300, TP890 external temperature probe, RH300-CAL calibration bottles and carrying case



RH355 Value Kit

Kit includes PC software

RH350/RH355 Dual Input Hygro-Thermometer Psychrometer

Two Type K External Probe inputs for Superheat plus memory

- Superheat differential measurements: T1-T2, Air-T1, and T1-Dew Point
- Backlit LCD displays 3 parameters: %RH and Temperature with either Dew Point, Wet Bulb or Type K
- RS-232 interface - optional software
- Stores up to 99 data points
- MAX/MIN with time stamp+AVG
- Data Hold, Auto power off
- RH350 includes 2 Type K bead wire probes (-58 to 482°F/-50 to 250°C), 4 AAA batteries
- RH355 kit (see photo on p. 85) includes RH350, RH350-CAL calibration bottles, 589250 software cable, and case



High Accuracy

RH390/RH490 Precision Hygro-Thermometer Psychrometer

Highest 2% RH accuracy with Fast 30 second Response Time

- Dual backlit display
- Simultaneous display of: Humidity/Temperature Humidity/Dew Point Humidity/Wet Bulb
- Fast 30 second response time
- Slim design with rubberized sides for better grip and for one hand operation
- **Model RH490** measures Grains Per Pound (grams per kilogram) to 1120GPP (160g/kg)
- Complete with carrying case and 9V battery



BUILT IN IR Thermometer Patented

RH405 Value Kit

Kit includes PC software

RH401/RH405 Psychrometer + 8:1 InfraRed Thermometer

IR for Non-contact Temperature measurements

- Triple display with backlighting:
 - Air temp+RH+surface temp
 - Dew Point+RH+surface temp
 - Wet Bulb+RH+surface temp
- Calculates T1 - DP, (IR Surface Temperature) - (Dew Point) differential
- Data Hold and Auto power off
- Built-in RS-232 interface (optional 407752 software & cable) - captures readings to a PC using Windows® Hyperterminal
- **RH401** includes 4 AAA batteries and carrying case
- **RH405** kit includes RH401, RH401-CAL calibration bottles, 407752 software/cable, and case



NEW

BUILT IN IR Thermometer Patented

USB port, cable and PC software included

HD500/HD550 Psychrometers + 30:1 InfraRed Thermometer

Combination Humidity Meter, Type K thermometer, and InfraRed Thermometer

- Built-in IR Thermometer for non-contact surface temperature measurements
- Type K Thermometer for contact temperature measurement
- Highest 2% RH accuracy
- Large triple LCD backlit display
- USB port includes PC software
- Auto power Off
- **Model HD550** measures Grains Per Pound (grams per kilogram) to 1120GPP (160g/kg)
- Complete with Type K bead wire probe (-22 to 572°F/-30 to 300°C), PC software, USB cable, built-in stand, case, & 9V battery

Psychrometer Kits



RH305 Kit — includes RH300, temperature probe, 33% and 75% calibration bottles, and case



RH355 Kit — includes RH350, 33% and 75% calibration bottles, PC cable, and case



RH405 Kit — includes RH401 with 33% and 75% calibration bottles, PC cable, and case

RH390	RH490	RH401	RH405 (kit)	HD500	HD550	Model
Capacitance	Capacitance	Capacitance	Capacitance	Capacitance	Capacitance	Sensor Type
-22 to 199°F (-30 to 100°C)	-22 to 199°F (-30 to 100°C)	-90.4 to 122°F (-68.0 to 49.9°C)	-90.4 to 122°F (-68.0 to 49.9°C)	-90.4 to 140°F (-68 to 60°C)	-90.4 to 140°F (-68 to 60°C)	Dew Point
32 to 176°F (0 to 80°C)	32 to 176°F (0 to 80°C)	-6.9 to 122°F (-21.6 to 49.9°C)	-6.9 to 122°F (-21.6 to 49.9°C)	-6.88 to 140°F (-21.6 to 60°C)	-6.88 to 140°F (-21.6 to 60°C)	Wet Bulb
0 to 100%RH (±2%RH)	0 to 100%RH (±2%RH)	0 to 100% (±3%RH)	0 to 100% (±3%RH)	0 to 100% (±2%RH)	0 to 100% (±2%RH)	Humidity (Basic Accuracy)
-22 to 199°F (-30 to 100°C)	-22 to 199°F (-30 to 100°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	14 to 140°F (-10 to 60°C)	14 to 140°F (-10 to 60°C)	Temperature (internal)
±1.8°F/1°C	±1.8°F/1°C	±1.8°F (±1°C)	±1.8°F (±1°C)	±4°F (±2°C)	±4°F (±2°C)	Basic Accuracy
—	—	—	—	-148 to 2501°F (-100 to 1372°C)	-148 to 2501°F (-100 to 1372°C)	Temperature (external)
—	—	—	—	±3%	±3%	Basic Accuracy
—	—	-40 to 932°F (-40 to 500°C)	-40 to 932°F (-40 to 500°C)	-58 to 932°F (-50 to 500°C)	-58 to 932°F (-50 to 500°C)	Temperature (IR)
—	—	±3%	±3%	±2% or ±4°F (±2°C)	±2% or ±4°F (±2°C)	Basic Accuracy
—	—	Adjustable 0.3 to 1.0	Adjustable 0.3 to 1.0	0.95 fixed	0.95 fixed	Emissivity
—	—	8:1	8:1	30:1	30:1	Field of View
—	—	Optional	Optional	USB	USB	PC Interface
—	—	RS-232	RS-232	—	—	Memory/Datalogging
CE/ 1 year	CE/ 1 year	CE/ 1 year	CE/ 1 year	CE/ ✓ 3 years	CE/ ✓ 3 years	CE/Warranty
7.8x1.7x1.3" (200x45x33mm)/7oz (200g)	7.8x1.7x1.3" (200x45x33mm)/7oz (200g)	10x2.9x2" (255x75x50mm)/12.2oz (350g)	10x2.9x2" (255x75x50mm)/12.2oz (350g)	10x2.9x2" (255x75x50mm)/12.2oz (350g)	10x2.9x2" (255x75x50mm)/12.2oz (350g)	Dimensions/Weight



Humidity & Temperature Meters

Extech's Humidity/Temperature meters are available in the style to fit the user's measurement needs: remote probe for easy access into ducts and vents, and integral probe for convenient one hand operation.

Featuring Model HT30

► Heat Stress Index

Measures how hot it feels when humidity is combined with temperature, air movement, and radiant heat

► Wet Bulb Globe Temperature

Considers the effects of temperature, humidity and direct or radiant sunlight

► Black Globe Temperature

Monitors the effects of direct solar radiation on an exposed surface

► PC Interface

Capture and analyze data



Ideal for use in sporting events



Kit includes calibration standards and case

445580/445582 Humidity/ Temperature Pen

Compact, Digital Hygro-Thermometer, ideal for field use

- Simultaneous display of Temperature (°C/°F) and Relative Humidity
- MAX/MIN and Data Hold
- Built-in self calibration utility allows for field calibrations using optional Relative Humidity calibration bottles (RH300-C)
- **Model 445580** includes meter with pocket clip and 3V lithium battery
- **Model 445582** includes 445580 plus 33% and 75% RH calibration standards, and hard vinyl case

Accessories

RH300-CAL ...33% & 75% RH Calibration Kit
407752.....Software and Cable for HT30

Order Meter with NIST Certificate*

All Extech meters come factory calibrated. For an additional charge, Extech will supply your meter complete with a Certificate of Calibration Traceable to N.I.S.T. with Data at multiple points.

To order meter with NIST:

- 445580-NIST
- 445582-NIST
- EA20-NIST
- EA25-NIST

*Only products listed are available with NIST Certificate. Meter must be ordered with NIST Certificate at time of purchase.

Specifications

Model	445580 Pen	445582 Kit
Sensor Type		Capacitance
Humidity		10 to 90%
Dew Point		—
Temperature (Wet Bulb Globe)		—
Temperature (Black Globe)		—
Temperature (Air)		14 to 122°F (-10 to 50°C)
Temperature (IR)		—
Basic Accuracy		±5%, ±1.5°
Max. Resolution		0.1%, 0.1°
PC Interface		—
Datalogging		—
Dimensions		5.7x1.2x1" (145x30x25mm)
Weight		2.3oz (65g)
CE		Yes
Warranty		1 year



HT30 Heat Stress WBGT Meter

Wet Bulb Globe Temperature (WBGT) considers the effects of temperature, humidity and direct or radiant sunlight

- Heat Stress Index measures how hot it feels when humidity is combined with temperature, air movement, and radiant heat
- Black Globe Temperature (TG) monitors the effects of direct solar radiation on an exposed surface
- In/Out Function displays the WBGT value with or without direct sun exposure
- Auto power off with override
- Built-in RS-232 interface with optional PC software (407752)
- Complete with two AAA batteries



BUILT IN IR
Thermometer
Patented



Non-contact Temperature measurements

RH101 Hygro-Thermometer + IR

Humidity, Air Temperature plus IR for non-contact Temperature measurements

- Large backlit LCD dual display
- Primary and Secondary displays: Primary display is user selectable for IR or Humidity; Secondary displays ambient temperature
- InfraRed thermometer has built-in laser pointer, 8:1 distance to target ratio, and fixed 0.95 emissivity
- Auto power off, MAX and Data Hold
- Remote humidity sensor with 39" (1m) coiled cable measures both humidity and ambient temperature
- Overrange indication
- Complete with built-in stand, holster, Humidity/Temperature probe, 9V battery, and carrying case



EA20/EA25 EasyView® Hygro-Thermometer and Datalogger

Stores up to 99 or 15,000 readings

- Dual display of RH, Temperature, Dew Point and Wet Bulb
- Data Hold, Relative, and MAX/MIN
- Programmable power off timer
- Complete with stand, holster, probe with 39" (1m) cable, 6 AAA batteries, and carrying case; Model EA25 includes Windows® compatible software and cable
- **EA20** - Stores up to 99 manual readings for display recall
- **EA25 additional features**
- Stores up to 15,000 readings for PC download
- Programmable Start/Stop datalogging time and sample rate of 1 to 86,000 seconds

HT30	RH101	EA20	EA25
Capacitance	Capacitance	Capacitance	Capacitance
0 to 100%RH	10 to 95%	10 to 95%	10 to 95%
—	—	-91.1 to 139.8°F (-68.4 to 59.9°C)	—
32 to 122°F (0 to 50°C)	—	—	—
-22 to 1022°F (-30 to 550°C)	—	—	—
32 to 122°F (0 to 50°C)	-4 to 140°F (-20 to 60°C)	-4 to 140°F (-20 to 60°C)	—
—	-58 to 932°F (-50 to 500°C)	—	—
±3%, ±1.1°F/0.6°C	±3.5%RH; ±2% or ±4°F/2°C (IR); ±3°F/1.5°C (Air)	±3%RH, ±1.8°F (±1°C)	±3%RH, ±1.8°F (±1°C)
0.1%, 0.1°	0.1%, 0.1°	0.1%, 0.1°	0.1%, 0.1°
Yes	—	—	Yes
—	—	99 readings	15,000 readings
Meter: 10x1.9x1.1" (254x49x30mm); Ball: 1.6" (40mm)dia, 1.4" (35mm) high	5.9x2.95x1.57" (150x75x40mm)	6x2.8x1.4" (152x72x35mm)	—
4.8oz (136g)	7oz (200g)	8.3oz (235g)	—
Yes	Yes	Yes	—
1 year	1 year	1 year	—