Elcometer 319   Dewpoint Meter

This rugged gauge is designed to measure and record all relevant climatic parameters required to determine whether the conditions are suitable for painting.

A hand-held Dewpoint meter with both manual and automatic data logging in one gauge

Robust temperature sensors

Integrated magnets allow the gauge to be attached to the substrate during remote logging
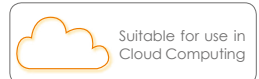
Easy to use, intuitive menu structure

Visual and audible indication of user defined limits for any or all parameters

Dustproof and waterproof gauge with fully sealed sensors (equivalent to IP66)

Stores 25,000 records in up to 999 batches

Gauges can be recertified at Elcometer Authorised Service Centres

Suitable for use in Cloud Computing

2 YEAR* WARRANTY

Made for iPod iPhone iPad

Android™

available with Bluetooth® wireless technology

compatible with ElcoMaster®

Elcometer 319 Model T: Made for iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPad Air 2, iPad mini 3, iPad Air, iPad mini 2, iPad (3rd and 4th generation), iPad mini, iPad 2, and iPod touch (4th and 5th generation)."Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod touch, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod touch, iPhone, or iPad may affect wireless performance.

Dewpoint Meter

Measure and record climatic parameters:

- Relative humidity
- Air temperature
- Surface temperature
- Dewpoint temperature
- TΔ (the difference between surface temperature and dewpoint)
- Dry Bulb temperature
- Wet Bulb temperature
- External temperature correction (K-type)
- Specific Humidity

T_s	T_a	T_d	T_Δ	RH	SH	T_{db}	T_{wb}	T_e

Flexible

The Elcometer 319 can be used as either a hand-held dewpoint meter or as a remote data logging monitor.†

Designed to last

Robust, durable & weather resistant, the Elcometer 319 is available with a 2 year* manufacturer's warranty; giving you piece of mind.

Data output to PC, Android™ or iOS mobile device

Connect the Elcometer 319 via Bluetooth® or USB to a PC, Android™ or iOS mobile device & download the data into an inspection application or into ElcoMaster® for instant report generation.

Large easy to read measurements in degrees °C or °F

View up to 5 user selectable statistics on screen

USB and Bluetooth® data output to ElcoMaster® software

Review individual readings

The latest National and International Standards have been identified. Those in Orange are current and those in Grey have been superseded but are still recognised in some industries.

† Model T only

* The Elcometer 319 gauges are supplied with a one year warranty against manufacturing defects. The warranty can be extended to two years via www.elcometer.com.

Elcometer 319   **Dewpoint Meter**

Accurate

- Meets ISO 8502-4
- Each instrument is supplied with a Calibration Certificate
- Readings are switchable between Celsius and Fahrenheit
- All readings are time & date stamped

Simple

- Easy menu-driven user interface in multiple languages
- Clear, illuminated display showing up to five user-defined parameters
- Arrow indicators show temperature trends

Flexible

- The gauge can be used as either a hand-held Dewpoint meter or as a remote data logging monitor[†]
- Integrated K-Type connector allows measurement of surface temperature during remote logging using a remote probe
- Using an external probe the "Te" mode transforms the gauge into a thermometer - ideal for measuring temperature of a paint prior to application
- Hold/freeze function allows manual readings to be reviewed before being added into the memory

Durable

- Safe use in climates ranging between -20°C (-4°F) and +80°C (+176°F)
- Waterproof and dust proof rating equivalent to IP66
- Rugged and ergonomic design, re-engineered sensors have greater durability for an extended life

Versatile

- Rapid response time
- Data can be downloaded to a PC via USB or Bluetooth® and evaluated using ElcoMaster® Software[†]
- Each gauge can be powered by either 2 AA batteries (for up to 400 hours[#] use) or directly via the USB cable
- Adjustable limits can be set for each measurement parameter which trigger visual and audible alarms whenever a limit is exceeded
- Intelligent memory calculates total available logging time when using batches
- Gauges can be recertified at Elcometer Authorised Service Centres

[†]Model T only.

[#]Based on 1 reading every 10 minutes in logging mode.

Te - Ideal for use as a simple thermometer

Waterproof and rugged to IP66

Remote monitoring of climatic parameters

elcometer®

Dewpoint Meter

Technical Specification   C

Model	Model S	Model T	Certificate
Part Number	G319----S	G319----T	●
Reading Parameters - RH, Ta, Ts (Te[6]), Td, TΔ, Tdb, Twb[1], SH[1]	■	■	
Statistics - number of readings, standard deviation, mean, coefficient of variation, minimum, maximum	■	■	
Dustproof & Waterproof Gauge with Fully Sealed Sensors - equivalent to IP66	■	■	
Integral Magnets - secure the gauge during logging	■	■	
High/Low Limits - audible, visual, red/green LED alarms can be set against any or all parameters	■	■	
Multilingual Menus	■	■	
Backlight - user selectable	■	■	
K-Type Connector for External Measurement	■	■	
Memory - with reading and statistic review	Last 10 records	25,000 records in 999 batches	
Manual Logging	■	■	
Interval Logging[2]		Adjustable between 1 second and 1 hour	
Data Output			
USB		■	
Bluetooth® *to computer, Android™ & iOS[4] devices*		■	
ElcoMaster® software & USB cable		■	

	Temperature Range	Accuracy	Resolution
Gauge[5]	-20 to +80°C (-4 to +176°F)	±0.5°C (±1°F)	0.1°C (0.1°F)
Air Temperature (Ta)	-20 to +80°C (-4 to +176°F)	±0.5°C (±1°F)[7]	0.1°C (0.1°F)
Surface Temperature (TS)	-20 to +80°C (-4 to +176°F)	±0.5°C (±1°F)	0.1°C (0.1°F)
External K-Type Thermocouple (Te)	-40 to +200°C (-40 to+392°F)	±0.5°C (±1°F)[6]	0.1°C (0.1°F)
Relative Humidity (RH)	0 to 100%RH	±3%RH[3]	0.1%
Gauge & LCD Operating Range	-20°C to +80°C (-4°F to +176°F)		
Power Supply	2 x AA batteries or via USB Cable		
Battery Life	Manual Mode: Greater than 40 hours (Backlight Off) Interval Logging: up to 400 hours (1 reading every 10 minutes)		
Dimensions	180 x 75 x 35mm (7 x 3 x 1.4")	Weight	300g (0.66lb)
Packing List	Elcometer 319 Dewpoint Meter, 2 x AA batteries, wrist strap, carry case, calibration certificate, USB cable†, ElcoMaster®† and operating instructions		

Accessories

T31920162	Magnetic Surface Temperature Probe; -40 to +80°C (-40 to +176°F)
T9996390-	Liquid Temperature Probe; -200 to +1100°C (-328 to +2012°F)
T99921325	USB Cable
T99916063	Wrist Strap
T99923480	Protective Carry Case/Pouch

[1] Calculated Value   [2] With Part Number T31920162   [3] at 1m/s
[4] Visit www.elcometer.com/sdk to find out how to integrate Elcometer's MFi certified products to your App.
[5] Do not expose the gauge to temperatures outside the gauge and LCD operating range
[6] Accuracy ±2°C (4°F) with K Type probes supplied by Elcometer. Gauge tested with voltage input
[7] Accuracy ±0.75°C below 10°C (±1.35°F below 50°F)   †Model T only.

● Certificate supplied as standard.

Elcometer 319　　　　**Dewpoint meter**

Create instant reports with ElcoMaster®

What you do with the collected data is just as important as taking the readings themselves.

ElcoMaster® is a fast, easy to use software solution for all your data management and quality assurance needs, preparing professional inspection reports at the click of a button.

Data transferred to ElcoMaster® includes;
- RH, Ta, Ts, Td, TΔ, Tdb, Twb, SH readings
- Date & time for each reading
- Batch information & statistics

Whether you are in the field or on the factory floor, using the ElcoMaster® Mobile App users can;
- Store live readings directly on to a mobile device and save them into batches
- View graphs in real-time whilst carrying out the inspection
- Add notes to individual batch reading
- Add photographs of the test surface to each individual batch reading at the click of a button
- Plot individual readings on to a location Map photograph or diagram via the mobile device's internal GPS
- Inspection data can be transferred from mobile to PC for further analysis and reporting
- Generate instant .pdf report for submission

Dewpoint meter

Connect
Connect gauge via Bluetooth® to see live readings directly on the phone and save them into batches.

Review
Review average, maximum and minimum readings instantly.

Manage & Print
Store all data; gloss, dry film thickness, surface profile, climate and manual reports in easy to manage folders.

Photos & Notes
Add photos, notes and comments.

Image Collection
Use measurement location points on images to indicate the position for the next reading.

Combine
Combine different inspection parameters (such as climate, DFT, surface profile, surface cleanliness and adhesion) together with images, notes and other project specific information into reports.

Collaborate
Share inspection data securely via the Cloud and collaborate on projects using the instant messaging feature in ElcoMaster®.

Send
Email inspection data from a mobile device to a PC for further analysis and reporting or transfer data via the Cloud.

PDF

Email

Cloud

Dropbox works with Google Drive **FTP** server

PC

ANDROID APP ON Google play

Download on the App Store

compatible with ElcoMaster®