## 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.


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


View up to 5 user selectable statistics on screen


Review individual readings

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

Integrated magnets allow the gauge to be attached to the substrate during remote logging

Stores 25,000 records in up to 999 batches

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

Gauges can be recertified at Elcometer Authorised Service Centres



Robust temperature sensors

Easy to use, intuitive menu structure

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

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

USB and Bluetooth® data output to ElcoMaster® software

compatible with ElcoMaster®

available with Bluetooth® wireless technology

Suitable for use in Cloud Computing

**Android™**

Made for iPod iPhone iPad

STANDARDS:
BS 7079-84, IMO MSC.215(82), IMO MSC.244(83), ISO 8502-4, US Navy NSI 009-32, US Navy PPI 63101-000

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 Those in Orange are current and those in Grey have been superseded but are still recognised in some industries.

TS | Ta | Td | TΔ | RH | SH | Tdb | Twb | Te

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## 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[a] 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.
[a] 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

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**Dewpoint Meter**

### Technical Specification          C

| Model | | Model S | Model T |
|---|---|---|---|
| Part Number | | G319—S | G319—T |
| Reading Parameters - RH, Ta, TS, 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[3] devices | | | ■ |
| ElcoMaster® software & USB cable | | ● | ● |
| Certificate | | ● | ● |

| | Temperature Range | Accuracy | Resolution |
|---|---|---|---|
| Gauge[†] | -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) | 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)[*] | 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) |
| T99963900- | Liquid Temperature Probe; -200 to +1100°C (-328 to +2012°F) |
| T99921325 | USB Cable |
| T99916063 | Wrist Strap |
| T99923480 | Protective Carry Case/Pouch |

● Certificate supplied as standard.

[†] Calculated Value          [2] With Part Number T31920162          [3] @ 1m/s
[3] Visit www.elcometer.com/sdk to find out how to integrate Elcometer's MFi certified products to your App.
[1] Do not expose the gauge to temperatures outside the gauge and LCD operating range
[*] Accuracy ±2°C (4°F) with K Type probes supplied by Elcometer. Probes supplied by other manufacturers may vary.
^ Model T only

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## Create instant reports with ElcoMaster®

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

**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.

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

Email

PDF

Cloud

Dropbox    Google Drive    FTP server

PC

ANDROID APP ON Google play    Download on the App Store    compatible with ElcoMaster

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