

elcometer®  
inspection equipment



Elcometer 319  
Dewpoint Meter

**Elcometer 319**

**Dewpoint Meter**

The rugged **Elcometer 319** Dewpoint Meter is designed to measure and record all relevant climatic parameters required to determine whether the conditions are suitable for painting.

Stores 25,000 records in up to 999 batches<sup>1</sup>

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

A hand-held Dewpoint meter with both manual and automatic data logging in one gauge<sup>1</sup>

Robust temperature sensors

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

Easy to use, intuitive menu structure

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

Gauges can be recertified at Elcometer Authorised Service Centres

**2 YEAR\***  
WARRANTY

<sup>1</sup> Model T only

\* The Elcometer 319 is supplied with a 1 year warranty against manufacturing defects. The warranty can be extended free of charge to 2 years within 60 days of purchase via [www.elcometer.com](http://www.elcometer.com).

## Dewpoint Meter

## Elcometer 319

### Measure and record climatic parameters:

- RH** Relative humidity
- T<sub>a</sub>** Air temperature
- T<sub>s</sub>** Surface temperature
- T<sub>d</sub>** Dewpoint temperature
- T<sub>Δ</sub>** T<sub>Δ</sub> (the difference between surface temperature and dewpoint)
- T<sub>db</sub>** Dry Bulb temperature
- T<sub>wb</sub>** Wet Bulb temperature
- T<sub>e</sub>** External temperature correction (K-type)
- SH** Specific Humidity

### STANDARDS:

BS 7079-B4, IMO MSC.215(82),  
IMO MSC.244(83), ISO 8502-4,  
US Navy NSI 009-32,  
US Navy PPI 63101-000



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

### Versatile

- Rapid response time
- Each gauge can be powered by either 2 x AA batteries (for up to 400 hours<sup>1</sup> 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



View up to 5 user selectable statistics on screen

### Easy to Use

The Elcometer 319 can be used as either a hand-held dewpoint meter or as a remote data logging monitor.<sup>2</sup>



Review individual readings

<sup>1</sup> Based on 1 reading every 10 minutes in Logging Mode.

<sup>2</sup> Model T only

## Elcometer 319

## Dewpoint Meter



Te - Ideal for use as a simple thermometer



Waterproof and rugged to IP66



Remote monitoring of climatic parameters

### 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 separate probe
- Using an external probe the "Te" mode transforms the gauge into a thermometer - ideal for measuring the temperature of paint prior to application
- Hold/freeze function allows manual readings to be reviewed before being added into the memory

\* Model T only

**Elcometer 319**



Easy to use with an intuitive menu structure



Dustproof and waterproof with fully sealed sensors

**Dewpoint Meter**

**Durable**

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

**Designed to last**

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

**Powerful**

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.



**2 YEAR\***  
WARRANTY



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## Elcometer 319

## Dewpoint Meter

### Technical Specification

Model	Model S	Model T	Certificate
Part Number	G319-----S	G319-----T	●
Reading Parameters - RH, Ta, Ts (Te <sup>6</sup> ), Td, TΔ, Tdb, Twb <sup>1</sup> , SH <sup>1</sup>	■	■	
Statistics - number of readings, standard deviation, mean, coefficient of variation, minimum, maximum	■	■	
Dustproof & waterproof 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 <sup>2</sup>		Adjustable between 1 second and 24 hours	
Data Output			
USB		■	
Bluetooth® to computer, Android™ & iOS <sup>4</sup> devices		■	
ElcoMaster® software & USB cable		■	
	Temperature Range	Accuracy	Resolution
Gauge <sup>5</sup>	-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) <sup>7</sup>	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) <sup>6</sup>	0.1°C (0.1°F)
Relative Humidity (RH)	0 to 100%RH	±3%RH <sup>3</sup>	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 <sup>8</sup> , ElcoMaster <sup>®8</sup> 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

<sup>1</sup> Calculated Value

<sup>2</sup> With Part Number T31920162

<sup>3</sup> at 1m/s

<sup>4</sup> Visit [www.elcometer.com/sdk](http://www.elcometer.com/sdk) to find out how to integrate Elcometer's MFi certified products to your App.

<sup>5</sup> Do not expose the gauge to temperatures outside the gauge and LCD operating range

<sup>6</sup> Accuracy ±2°C (4°F) with K Type probes supplied by Elcometer. Gauge tested with voltage input

<sup>7</sup> Accuracy ±0.75°C below 10°C (±1.35°F below 50°F) <sup>8</sup> Model T only.

● Certificate supplied as standard.

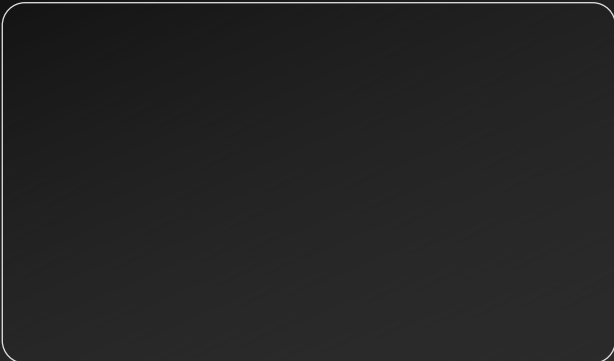


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Elcometer 319 Model T. Made for iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPad Air 2, iPad mini 3, iPad Air, iPad mini 2, iPad (3rd and 4th generation), iPad mini, iPad 2, and iPod touch (4th and 5th generation). "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.

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Due to our policy of continuous improvement, Elcometer Limited reserves the right to change specifications without notice. All gauges come with a 1 year warranty as standard, the Elcometer 319 is extendable within 60 days from date of purchase, free of charge, to 2 years via [www.elcometer.com](http://www.elcometer.com)