elcometer

Elcometer 319 Dewpoint Meter
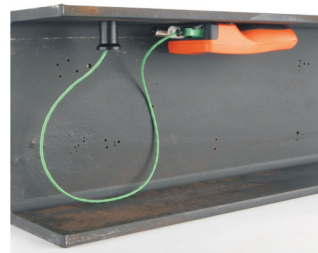
Can be used in accordance with:
BS 7079-B4*, **IMO MSC.215(82), IMO MSC.244(83), ISO 8502-4,
US Navy NSI 009-32, US Navy PPI 63101-000**

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

The versatile gauge can be used as a hand-held dewpoint meter or as a remote data logging monitor[1] and is able to measure and record the following climatic parameters:

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

Quick, Simple and Easy-to-Use

- The Elcometer 319 Dew Point Meter features both manual and automatic data logging in one gauge[1], with integrated magnets allowing the gauge to be attached to a substrate during remote logging. Its rapid response time and intuitive menu structure make measuring climatic conditions quick and easy.
- Adjustable limits can be set for each measurement parameter which triggers visual and audible alarms whenever a limit is exceeded, ideal for use in paint booths.
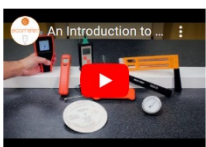
Flexible and Versatile

- Using external probes, the versatile gauge can also be used as a thermometer - ideal for measuring temperature of paint prior to application and to measure surface temperature during remote logging.

It's what you do with the data that counts

- Via Bluetooth® or USB, the Elcometer 319 can be connect to a PC, Android™ or iOS mobile device to download data into an inspection application or ElcoMaster®. Data can then be sent to colleagues and clients in real-time and instant professional inspection reports can be generated at the press of a button.

Video

YouTube Video - An Introduction to Climatic Testing (Click on the image to the left to view)

When it comes to applying a coating; whether in a shipyard, in a construction yard, or even in a warehouse; even if you have successfully controlled and monitored the surface cleanliness, surface profile, and both the wet and dry film thickness, if the climatic conditions are wrong at the time of application, this could cause the coating to fail – regardless of the success of the other parameters.

* Standards not in <u>bold</u> have been superseded but are still recognised in some industries

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

View up to 5 user selectable statistics on screen

Review individual readings

Features

Accurate

- Meets ISO 8502-4
- Each instrument is supplied with a Calibration Certificate
- 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
- Hold/freeze function allows manual readings to be reviewed before being added into the memory

Flexible

- Can be used as a hand-held dewpoint meter or as a remote data logging monitor[1]
- Magnetic Surface Temperature Probe allows measurement of surface temperature during remote logging
- Liquid temperature probe transforms the gauge into a thermometer

Durable

- Safe use in climates ranging between -20°C and +80°C
- Waterproof and dust proof with fully sealed sensors - rating equivalent to IP66
- Re-engineered sensors have greater durability for an extended life

Powerful

- Data can be downloaded to a PC via USB or Bluetooth® and evaluated using ElcoMaster® Software[1]
- Powered by either two AA batteries (for up to 400 hours[2] use) or directly via the USB cable
- Intelligent memory calculates total available logging time when using batches
- Stores 25,000 records in up to 999 batches[1]

1 Model T only
2 Based on one reading every 10 minutes in logging mode.

For Table below

1 Calculated Value
2 With Part Number T31920162
3 Accuracy ±0.75°C below 10°C
4 Accuracy ±2°C with K Type probes supplied by Elcometer.

5 At 1m/s
Do not expose the gauge to temperatures outside the gauge and LCD operating range
+ Model T only
• Certificate supplied as standard

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Technical Specifications

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* devices		■
ElcoMaster® software & USB cable		■
Certificate	■	■

	Temperature Range	Accuracy	Resolution
Gauge#	-20 to +80°C	±0.5ºC	0.1ºC
Air Temperature (Ta)	-20 to +80°C	±0.5°C[3]	0.1ºC
Surface Temperature (Ts)	-20 to +80°C	±0.5°C	0.1ºC
External K-Type Thermocouple (Te)	-40 to +200°C	±0.5°C[4]	0.1ºC
Relative Humidity (RH)	0 to 100%RH	±3%RH[5]	0.1%
Gauge & LCD Operating Range	-20°C to +80°C		
Power Supply	2 x AA 1.5V 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		
Weight	300g		

Packing List

Elcometer 319 Dewpoint Meter
2 x AA Batteries
Wrist Strap
Carry Case
Calibration Certificate
USB Cable+
ElcoMaster® Software+
Operating Instructions

Accessories

Part Number	Description
T31920162	Magnetic Surface Temperature Probe; -40 to +80ºC
T9996390-	Liquid Temperature Probe; -200 to +1100ºC
T99921325	USB Cable
T99916063	Wrist Strap
T99923480	Protective Carry Case/Pouch