

Elcometer 319 Dewpoint Meter with Bluetooth®†



Elcometer 319 Dewpoint Meter

At a glance:

Bluetooth ®† wireless technology for fast data tr ansfer, ideal for easy report generation and archiving of readings

Measure and record climatic parameters:

Relative Humidity
Ambient Air Temperature
Surface Temperature
Dewpoint Temperature
Difference between
surface temperature and
dewpoint
Dry Bulb Temperature
Wet Bulb Temperature
Specific Humidity 1

Built-in statistics:

Number of Readings Mean Standard Deviation Coefficient of Variation Highest Reading Lowest Reading The Elcometer 319 Dewpoint Meter has been designed to measure and record all the relevant climatic parameters required to determine whether conditions are suitable for painting.

User friendly

Intuitive, multi-lingual menu structure with large, customer definable illuminated display.

Rugged design

Dustproof and waterproof equivalent to IP66 with fully sealed sensors, suitable for use in the harshest of environments.

Integrated high power magnets

Attach the gauge to any ferrous metal object without the need for additional equipment.

Versatile instrument

A hand-held Dewpoint Meter and remote data logging monitor in a single gauge[†].

High / Low limits

Limits can be set against any or all parameters, with visual and audible alarms when limits are exceeded.

Memory:

The Standard gauge has a 10 reading rolling memory. The Top gauge has the added advantage of a large inbuilt memory to accurately record each measurement, storing up to 40,000 sets of readings in 999 batches.

Bluetooth®† data output

Wireless connectivity from the gauge to a PC. Data can be downloaded to a PC and, using ElcoMaster™ Software, supplied free of charge, detailed reports can be created in seconds. Using ElcoMaster™ Mobile Software, data can be e-mailed directly to the office from the field using a PDA.

Climatic Testing

The monitoring of climatic conditions such as temperature, relative humidity, dewpoint and moisture in industry is often vital to the success of the application of the coating. These parameters determine both the conditions for application of a coating, and the resulting quality and performance of the coated product.

In the protective coatings industry, moisture can form on the surface when the surface temperature is low enough to cause condensation from the atmosphere. The Dewpoint Temperature (Td) is the point at which this occurs.

Monitoring air temperature (Ta) and its relative humidity (%RH) allows the dewpoint temperature to be calculated and compared to the surface temperature (Ts). The difference in temperature ($T\Delta$) is the key parameter dictating when it is safe to apply the coating.

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

Sprzedawca: PHU AKO 81-310 Gdynia, ul.. Śląska 58 tel: +48 607 23-28- 24 tel/fax +48 58 698-75-85, www.mierniki.info.pl

[†] Elcometer 319 Top only

¹ Calculated Value

data sheet











Accurate

Rapid response time User switchable between Celsius and Fahrenheit Date and time stamping of all readings data

Simple

Easy menu-driven user interface in multiple languages Clear, illuminated display showing up to five parameters from:

RH: % Relative Humidity
Ts: Surface Temperature
Ta: Ambient Air Temperature
Td: Dewpoint Temperature

 $T\Delta$: The difference between Td and Ts

Tdb: Dry Bulb Temperature
Twb¹: Wet Bulb Temperature
SH¹: Specific Humidity

Temperature trend indicators for all parameters

Flexible

Can be used as either a hand-held dewpoint meter or as a remote data logging monitor[†]

Integrated thermocouple socket for a magnetic surface probe or liquid probe

The gauge can be transformed into a simple thermometer by selecting the "Te" mode – ideal for measuring a coating's temperature prior to application or other external temperatures

Hold/Freeze function allows manual readings to be taken and reviewed before being logged into the memory

Durable

Manufactured from temperature resistant materials ensuring safe use in climates ranging between -20 stopni C and 80 stopni C

Waterproof and dustproof equivalent to IP66 Rugged and ergonomic design including fully sealed, durable sensors

Versatile

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 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 – even if it is not displayed on screen

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FEATURES	STANDARD	ТОР	
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 & Weatherproof Gauge with Fully Sealed Sensors (Equivalent to IP66)	•	•	
Integral Magnets - Secures the gauge to any ferrous metal object	•	•	
High/Low Limits - Audible, visual, Red/Green LED alarms can be set against any or all parameters	•	•	
Multi Language Menus	•	•	
Backlight - User selectable, brightness adjustment and timeout	•	•	
K-Type Connector for External Measurement	•	•	
Memory - With readings and statistics review	Last 10 records	40,000 records in 999 batches	
Manual Logging	•	•	
Interval Logging		User defined time intervals between 1 second and 24 hours	
USB & <i>Bluetooth</i> ® Wireless Data Output		•	
ElcoMaster™ and ElcoMaster™ Mobile Software		•	
Part Numbers	G319S	G319T	
Packing List	Elcometer 319 Dewpoint Meter, AA batteries (x2), wrist strap, carry case, calibration certificate, USB Cable [†] , ElcoMaster [™] & ElcoMaster [™] Mobile Software [†] and operating instructions		

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TECHNICAL SPECIFICATION				
	Range	Accuracy	Resolution	
Air Temperature (Ta)	-20 to +80 C	±0.5 C	0.1 C	
Surface Temperature (Ts)	-20 to +80 C	±0.5 C	0.1 C	
External K-Type Thermocouple (Te)	-40 to +200 C	±0.5 C [‡]	0.1 C	
Relative Humidity (RH)	0 to 100%RH	±3%RH	0.1%	
Specific Humidity	0 g/kg to 325 g/kg (0 gr/lb to 2275 gr/lb)	±8%	0.1 g/kg (0.1gr/lb)	
Gauge & LCD Operating Temperature	-20 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 (7 x 3 x 1.4")			
Weight	300g (10.6oz)			

 $^{^{\}dagger}$ Elcometer 319 Top only

[‡] Accuracy ±2şC (±4şF) when using Elcometer supplied probes

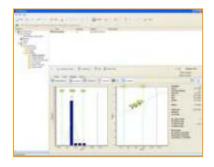
SPARES & ACCESSORIES		
Magnetic Surface Probe	T31920162	
Liquid Temperature Probe	T9996390-	
Protective Carry Case / Pouch	T99921192	
USB Cable	T99921325	
Wrist Strap	T99916063	

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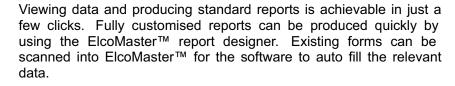
ElcoMaster™ Data Management Software[†]

ElcoMaster™ makes it easy to collate and use recorded data and is provided free of charge with the Elcometer 319 Top model. Inbuilt report templates and easy access to all data, images and other associated files, simplify data management.



The software has been designed to be familiar and intuitive to any PC user. When the gauge is connected to the PC, individual readings can be sent directly into the software for real time analysis or simply 'drag and drop' a batch from the gauge to the software.

Other associated, health and safety reports etc, can be stored within $\mathsf{ElcoMaster}^\mathsf{TM}$ - providing one programme that holds all the inspection information in one location.



Digital photographs can be assigned to an individual batch of data, allowing visual display of the inspection area in reports. Batches can be combined for immediate comparison of data from various areas of the job site.



ElcoMaster™ features include:

Create professional reports in seconds.

Export reports to spreadsheets, text files or save as PDF or JPEG files.

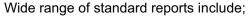
Copy and paste reports into other documents.

Reports can be combined in order to clearly compare different batches.

E-mail reports directly from ElcoMaster™.

Assign batch identification tags.

Batches can be renamed to clearly identify the inspection batch.

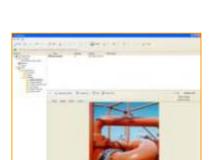


- Individual measurements
- Statistics
- o Histograms
- Individual line or bar charts
- Log normal
- o Pie charts

Fully customise reports using the ElcoMaster™ report designer tool.

Include company graphics and logos on every report. Combine batches to compare readings or link batches together from different gauges into one comprehensive inspection file.

Find feature to quickly locate a specific file or batch.





data sheet



Related Products

ENGLAND
Elcometer Limited
Edge Lane
Manchester M43 6BU



Elcometer 224

Elcometer 224 Digital Surface Profile Gauge with Bluetooth®

The Elcometer 224 Digital Surface Profile Gauge provides an accurate way to measure surface profiles in microns and mils. The Elcometer 224 Model T has a large built-in memory which can store up to 50,000 readings in 999 batches and offers Bluetooth® wireless technology for cable free data transfer.



Elcometer 456

Elcometer 456 Digital Coating Thickness Gauge with Bluetooth®

The new version of the Elcometer 456 now benefits from a larger display for easy data viewing and a simple calibration feature to make testing even quicker. The Elcometer 456 also features Bluetooth[®] wireless technology for fast data transfer to ElcoMaster™ Software, ideal for easy report generation and archiving of readings.



Elcometer Inspection Kits

Elcometer Inspection Kits

Site inspection requires a range of portable testing equipment. In order to make these products easily available and transportable, Elcometer have developed a range of inspection kits. All the gauges are conveniently stored in a hard plastic protective carrying case and are supplied with full operating instructions.