









# Diligence EV N2000 Series Data Loggers

Comark's Diligence EV range of data loggers provides a complete solution for the measurement of temperature, humidity or mA current.

The loggers are stand-alone, lightweight and small enough to be used almost anywhere that regular monitoring is required, reducing the need for manual checks and improving the accuracy of your information.

Use with EV Software to program logger tasks, download and analyse data, keeping permanent records to meet the requirements of industry regulations.

Housed in a robust case and waterproof to IP67 standards, the Diligence EV range includes multi-sensor models, capable of simultaneously monitoring several temperature locations.



#### **Features**

- LCD display screen allows instant checks of current readings and alarms
- Large memory capacity with wraparound for continual realtime and historic data collection no forgotten readings, just log data and download
- Alarm indication lights instantly warn of potentially unsafe conditions allowing instant corrective action
- Water and dustproof sealed to IP67 standards for long life expectancy and accuracy
- Lumberg connector provides secure connection of a wide range of Comark probes-types K, T or thermistor (model dependent)
- Battery life up to five years enabling logging assignments over extended periods
- Models with external probes are ideal for monitoring fridges and freezers
- Models with built in sensor are suitable for chillers, storage and transport applications
- Model measuring mA current can be easily connected into the control loop and programmed to measure a wide range of parameters for process and building management checks such as pressure, pH, airflow, dissolved oxygen and many more
- UKAS Calibration Certificates available
  on most models
- Software available free of charge, download from product pages on www.comarkinstruments.com.

Comark uses BioCote<sup>®</sup>, the only antimicrobial solution to be awarded HACCP International Certification, to provide an important extra level of defence against cross-contamination.

## The Professionals' Choice

### Warranty

All Comark instruments have a minimum one year warranty unless otherwise stated. The warranty for temperature probes is six months and all other probes are unwarranted because the conditions of use are beyond our control. The Comark Warranty covers manufacturing defects and component failure and applies worldwide. In line with our policy of continuous development, we reserve the right to alter any product specification without notice. Comark has an accredited UKAS (NIST equivalent) calibration laboratory for temperature and humidity measurement and offers full service and recalibration facilities.

Comark Instruments is committed to providing quality and affordable products to the food service industry. Our thermometers and humidity testers bring speed, accuracy and reliability to the transport, testing and storing of food under HACCP guidelines. A large variety of products, well-trained staff, and a commitment to customer satisfaction mean you can come to us for answers to all your temperature measurement needs!



#### **Comark Instruments**

52 Hurricane Way Norwich, Norfolk, NR6 6JB United Kingdom Tel: +44 (0) 207 942 0712 Fax: +44 (0) 207 942 0714 Email: sales@comarkinstruments.com

#### **Comark Instruments**

P.O. Box 500 Beaverton, OR 97077, USA Tel: +1 (503) 643 5204 Toll Free: (800) 555 6658 Fax: +1 (503) 627 5311 Email: sales@comarkusa.com



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## **Diligence Ev** Comark N2000 Series Data Loggers

#### Specifications

Sensor Type	
N2011, N2012, N2013	Thermistor
N2014	Type K or Type T thermocouple
Connector	Lumberg
Measurement Range	
N2011, N2012 internal sensor	-40°C to +70°C / -40°F to +158°F
N2012 external sensor	-40°C to +150°C / -40°F to +302°F
N2013 temperature	-20°C to +60°C / -4°F to +140°F
N2013 humidity	0 to 97% RH non condensing
N2014 – Type K	-200°C to +1372°C / -392°F to +2500°F
N2014 – Type T	-200°C to +400°C / -392°F to +752°F
N2014 - Thermistor	-40°C to +70°C / -40°F to +158°F
N2015	4 to 20mA
Scales	
Temperature	°C and °F
Humidity	RH or DP
Displayed Resolution	
Temperature	0.1° (1° below -100°C, -148°F
	and above +1000°C or °F)
Humidity N2014	0.1% RH 0.2°
N2015 only	4 digits 1 decimal place
	(software allows 0 to 4 decimals in logged data)
Internal Accuracy at +20°C/+65°F an	nbient
N2014	±0.5°C +0.5% (±0.9°F +0.5%) of reading over the
	range of -80°C to thermocouple limit
N2015	±0.3% of full scale
Memory	32К
1 channel	16000 samples
2 channels	8000 samples
3 channels	5300 samples
4 channels	4000 samples
5 channels	3200 samples
Logging Frequency	Programmable between 1 second and 99 hours,
N2014	2 seconds to 99 hours
Communications	Via infrared interface
Download Time	3 minutes per 10,000 readings (typical)
Ambient Storage	-40°C to +70°C/-40°F to +158°F
Battery Type	1 x AA size 3.6V replaceable lithium battery
Case Material	ABS
Environmental Protection	IP67, EN 60529, IEC 529

\* Software selection of decimals will affect recorded values, e.g. selection of 0 decimals =1 value of ±32000 and a selection of 4 decimals = a value of ±3.2000

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