

## 4-Channel Portable Data Loggers



OM-DAQLINK-TEMP

All models shown smaller than actual size.

OM-DAQLINK-TEMP-RH

### OM-DAQLINK Series



- ✔ 4 External Inputs for Current, Voltage, Thermocouple, RTD, Frequency/Pulse Counter/Contact Closure
- ✔ Internal Channels for Temperature (OM-DAQLINK-TEMP) or Temperature and Humidity (OM-DAQLINK-TEMPRH)
- ✔ 12V Power Available for External Devices
- ✔ Alarm Output
- ✔ Intuitive Keypad with Run/Pause Data Logging Option
- ✔ 4 Audio Alarms with Email/SMS Notification to Any Location
- ✔ Real-Time Data Streaming to PC or Large Cyclic Memory Storage
- ✔ On-Site Monitoring with Two Row LCD Display and Periodic USB Data Download
- ✔ Long-Lasting Rechargeable Battery
- ✔ Powerful Analysis Software for Windows XP/VISTA/7

With built-in temperature and humidity sensors, plus four external probe inputs the OM-DAQLINK Series standalone data loggers ensures a low cost, reliable and accurate solution. The OM-DAQLINK data logger is a 16-bit, mobile data acquisition device for continuous indoor or outdoor data monitoring.

The OM-DAQLINK Series is comprised of two data logger models, measuring a broad range of parameters on four external inputs for direct measurement and recording of PT100 RTD, J/K/T thermocouple, 0 to 1 V, 4 to 20 mA, contact, frequency and pulse sensors, as well as internal temperature and relative humidity sensors.

With its high resolution and fast Analog to Digital converter (ADC), OM-DAQLINK Series data loggers meet the majority of data acquisition requirements in most industrial applications. Every OM-DAQLINK data logger is embedded with a unique serial number and can be loaded with a descriptive comment

for safe identification. An internal clock and calendar keeps track of the time and date of every sample measured. OM-DAQLINK Series data loggers can automatically activate external alarm events when data is outside a specified range. Email and SMS notifications can be sent to predefined contacts.

The OM-DAQLINK Series includes two data logger models OM-DAQLINK-TEMP and OM-DAQLINK-TEMPRH. These data loggers support up to four external sensors and two internal sensors: internal temperature (OM-DAQLINK-TEMP and OM-DAQLINK-TEMPRH) and internal humidity (OM-DAQLINK-TEMPRH only). Data is recorded and stored to the data logger's internal memory and transmitted over the network to the DataSuite software running on the PC. The data logger is programmed to consume as little power as possible during operation, in order to conserve the battery life.

When not transmitting or recording data the units are in sleep mode and they wake up when needed. The battery for the OM-DAQLINK-TEMP and OM-DAQLINK-TEMPRH is rechargeable and can run up to several months on one charge, depending on the logger configuration (battery life depends on the logger sampling rate, transmission rate, type of sensor, and number of measured sensors).

OM-DAQLINK Series data loggers use the powerful DataSuite software. The Windows® based software is the central management interface of the OM-DAQLINK Series. When connected via USB cable to the PC, the data from the OM-DAQLINK data logger can be monitored online and displayed in real-time graphs or tables. Analyze data with various mathematical tools, or export data to a spreadsheet. The software also enables you to configure, calibrate or update the firmware of OM-DAQLINK Series data loggers via direct USB connection.

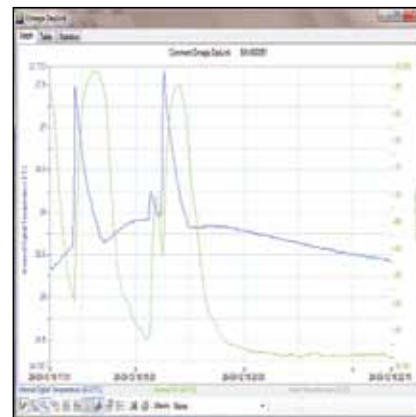
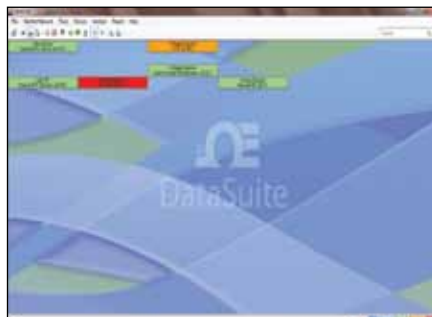
DataSuite provides one software platform for a wide range of Omega products in addition to the OM-DAQLINK Series data loggers, such as the OM-DATANET Series wireless modules and the OM-MICROLITE and OM-MICROLOGPRO portable, standalone loggers. DataSuite lets you monitor and compare data from multiple systems in a singular, uniform view.

### Key Features of the DataSuite Software Include:

- Multiple data view features, map view displaying unit location, signal path and strength
- Alarm features with 4 alarm levels sending email and SMS notifications
- Reporting module for creating and generating reports with selected distribution, analysis features including dew point analysis, FO Pasteurization, histogram, statistics with export to Excel and CSV formats.

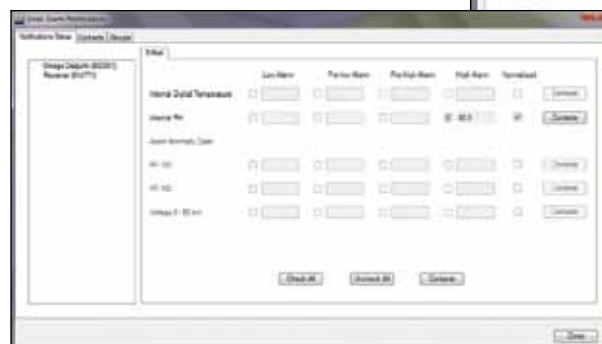
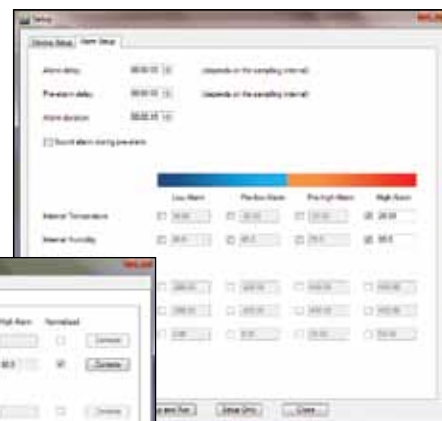
### DataSuite Data View Features

Real-time, online data in multiple displays (Graph, Table, Statistics, Sensor View).



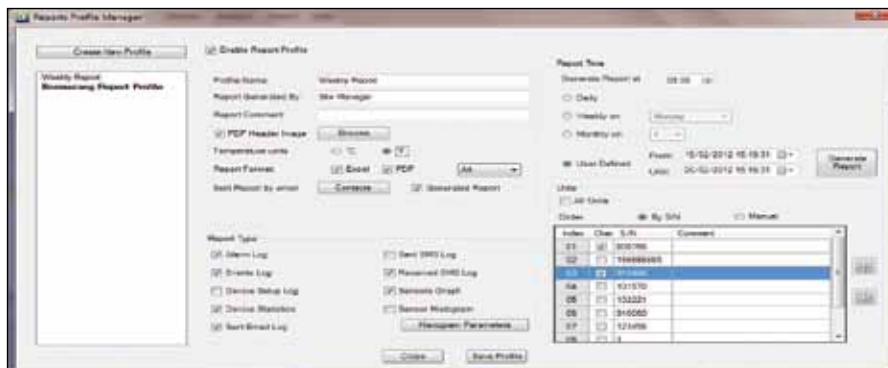
### DataSuite Alarm Features

Alarm level setup with email and SMS notifications. Four alarm levels, allowing for programming of 4 separate parameters, with alarm delay and duration.



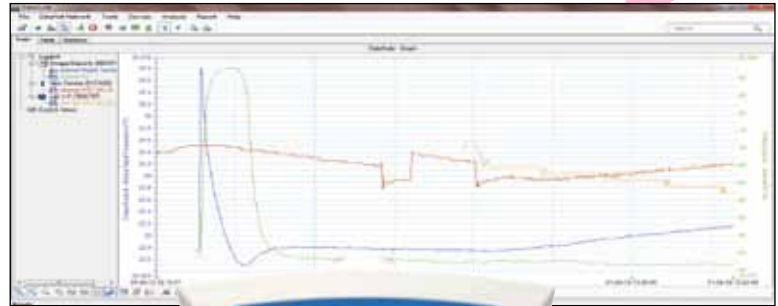
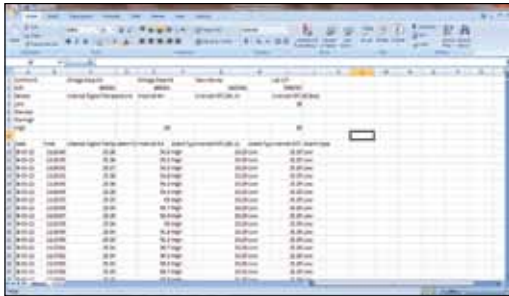
### DataSuite Report Module

The Report Module provides the OM-DAQLINK user with an intuitive interface for creating and generating reports which have many parameters garnered from the OM-DAQLINK data logger and software. Each report can be emailed to a selected distribution list, at predefined time intervals, in PDF and Excel format.



## DataSuite Analysis Features

Dew point analysis, FO Pasteurization, histogram, MKT, statistics with export to Excel and CSV formats.



## SPECIFICATIONS

### INPUTS

#### Number of External Inputs:

4 differential analog inputs

#### Input Type:

**Selectable Type for Each Input:**  
4 to 20 mA, 0 to 50 mV, 0 to 1 V, PT100 RTD, J/K/T thermocouple, pulse and frequency (input 4 only)

### INPUT TYPES

#### 4 to 20 mA

**Range:** 4 to 20 mA

**Resolution:** 4.76  $\mu$ A

**Accuracy:**  $\pm 0.5\%$

**Loop Impedance:** 21  $\Omega$

#### 0 to 50 mV

**Range:** 0 to 50 mV

**Resolution:** 3  $\mu$ V

**Accuracy:**  $\pm 0.5\%$

**Input Impedance:** 25 M $\Omega$

**Max Voltage:** 3.2V

#### 0 to 1V

**Range:** 0 to 1V

**Resolution:** 200  $\mu$ V

**Accuracy:**  $\pm 0.5\%$

**Input Impedance:** 25 M $\Omega$

**Max Voltage:** 3.2 V

#### Temperature Pt100 (2-Wires)

**Range:** -200 to 400°C  
(-328 to 752°F)

**Resolution:** 0.1°C

**Accuracy:** -200 to -60°C,  $\pm 0.5\%$ ;  
-60 to 60°C,  $\pm 0.3\%$ ; 60 to 400°C,  
 $\pm 0.5\%$

#### Temperature Thermocouple J

**Range:** -200 to 1000°C  
(-328 to 1832°F)

**Resolution:** 0.1°C

**Accuracy:** -200 to -60°C,  $\pm 0.5\%$ ;  
-60 to 60°C,  $\pm 0.5\%$ ; 60 to 1000°C,  
 $\pm 0.5\%$

**Cold Junction Compensation  
Error:**  $\pm 0.3\text{°C}$

#### Temperature Thermocouple K

**Range:** -200 to 1000°C  
(-328 to 1832°F)

**Resolution:** 0.1°C

**Accuracy:** -200 to -60°C,  $\pm 0.5\%$ ;  
-60 to 60°C,  $\pm 0.5\%$ ; 60 to 1000°C,  
 $\pm 0.5\%$

**Cold Junction Compensation  
Error:**  $\pm 0.3\text{°C}$

#### Temperature Thermocouple T

**Range:** -200 to 400°C  
(-328 to 752°F)

**Resolution:** 0.1°C

**Accuracy:** -200 to -60°C,  $\pm 0.5\%$ ;  
-60 to 60°C,  $\pm 0.5\%$ ; 60 to 400°C,  
 $\pm 0.5\%$

**Cold Junction Compensation  
Error:**  $\pm 0.3\text{°C}$

#### Frequency (Input 4 only)

**Type:** Zero crossing detector

**Range:** 20 Hz to 4 KHz

**Input Signal:** 0 to 4000 Hz

**Input Impedance:** 470  $\Omega$

#### Pulse Counter (Input 4 only)

**Type:** Zero crossing detector

**Range:** 1 to 65,536 counts

**Resolution:** 1 count

**Frequency Range:** 0 to 4000 Hz

**Input Signal:** 0 to 3.2 V

**Input Impedance:** 470  $\Omega$

#### Contact

**Range:** Open/Closed



OM-DAQLINK-TEMPRH, data logger with PRTF-10, RTD probes (sold separately) connected. Visit [omega.com/prtf-10](http://omega.com/prtf-10) for more information.

## Internal Temperature (OM-DAQLINK-TEMP and OM-DAQLINK-TEMPRH)

**Input Type:** Pt100  
(OM-DAQLINK-TEMP);  
digital (OM-DAQLINK-TEMPRH)  
**Range:** -20 to 50°C  
**Resolution:** 0.1°C  
**Accuracy:** ±0.3°C  
(OM-DAQLINK-TEMP): ±0.3°C  
(OM-DAQLINK-TEMPRH): ±0.5°C

## Internal Humidity (OM-DAQLINK-TEMPRH Only)

**Range:** 5 to 95%  
**Resolution:** 0.5%  
**Accuracy:** ±3% from 10 to 90%  
RH, ±5% from 5 to 10% RH  
and 90 to 95% RH

## OUTPUTS

### External Power Excitation

(Transducers Usage):  
12 Vdc @ 2 A, reset fuse  
overload protection

### Dry Contact Alarm Output

**Type:** Open collector  
**Close Position Resistance:** 50 Ω  
**Max Load:** 50 mA, 3 Vdc

## GENERAL SPECIFICATIONS

**PC Communication:** USB 2.0  
compliance, mini USB type B cable

### Operating Temperature:

-20 to 50°C (-4 to 122°F)

## MEMORY

**Memory Modes:** Cyclic/non-cyclic,  
push to run, pause

**Memory Capacity:** 59,000 samples

## SAMPLING INTERVAL

**Sampling Rate:** One every second  
to one every 18 hours for all sensors  
on all inputs, however there are  
certain limitations for particular  
combinations of sensors (see chart)

• **Sampling Resolution:** 16-bit

• **Channel Repetition:** 80 dB

## MAN MACHINE INTERFACE

**Keypad:** Two-button keypad operation

**Display:** 2-row LCD, 16 character

## POWER SUPPLY

**Power:** Internal rechargeable 4.8 V,  
800 mAh NiMH battery (2 batteries  
in series), built-in battery charger,  
external 12 Vdc input @ 300 mA  
3.6 VA

**Battery Life:** 6 months between  
charges (15 min sampling rate)

## MECHANICAL

**Enclosure Material:** ABS plastic

**Enclosure Rating:** Water and dust  
proof (IP54)

### Dimensions:

104 H x 93 W x 27 mm D  
(4.1 x 3.66 x 1.06")

**Weight:** 153 g (5.4 oz)

**Mounting:** Table or wall mounting

## DATASUITE SOFTWARE

### Supported Operating Systems:

Windows® XP SP3/Vista/7  
(32 and 64 Bit)

### Minimum Hardware Requirements:

Pentium 4, 2 GHz Processor or  
better, 512 MB RAM, 250 MB  
available disk space



OM-DAQLINK-TEMP data logger  
shown smaller than actual size.



OM-DAQLINK-TEMP-RH data logger  
shown smaller than actual size.



OMEGACARE<sup>SM</sup> extended  
warranty program is available for  
models shown on this page. Ask  
your sales representative for full  
details when placing an order.  
OMEGACARE<sup>SM</sup> covers parts,  
labor and equivalent loaners.

Sensor Combination	Maximum Sampling Rate
3 or 4 thermocouple or RTD inputs	3 sec
1 thermocouple or RTD input and internal temperature	3 sec
2 or 3 thermocouple or RTD inputs and internal temperature	4 sec
4 thermocouple or RTD inputs and internal temperature	5 sec

## To Order Visit [omega.com/om-daqlink](http://omega.com/om-daqlink) for Pricing and Details

Model No.	Description
OM-DAQLINK-TEMP	Data logger with 4 external inputs and internal temperature sensor
OM-DAQLINK-TEMPRH	Data logger with 4 external inputs and internal temperature and humidity sensors
OM-DAQLINK-SOFT	DataSuite software, and 3 m (10') USB interface cable
OM-DAQLINK-BATT	Replacement internal battery pack
OM-DAQLINK-GSM	GSM modem (for SMS alerts)
OM-DAQLINK-ADAPTOR-UNIV	Replacement universal 110/220 Vac power adaptor
OM-DAQLINK-USB-CABLE-3M	Replacement 3 m (10') USB interface cable

Comes complete with universal 110/220 Vac power adaptor and NIST calibration certificate. DataSuite software and USB interface cable are sold together as a separate package (OM-DAQLINK-SOFT) and are required to operate the data logger.

**Ordering Example:** OM-DAQLINK-TEMPRH data logger with 4 external inputs and internal temperature and humidity sensors and OCW-1 OMEGACARE extended 1 year warranty (adds 1 year to standard 1 year warranty), and OM-DAQLINK-SOFT DataSuite software, and 3 m (10') USB interface cable.