## Monitor - ISSN 1472-0221

The Newsletter for Data Acquisition and Control Issue 306 October 2024

Welcome to Monitor: thank you very much for subscribing. This month, a conversation about our data logging unit for remote monitoring and control, and how to use Excel as a data logger.

You can download Monitor as a pdf file from <a href="https://www.windmill.co.uk/monitor/monitor306.pdf">https://www.windmill.co.uk/monitor/monitor306.pdf</a>.



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# Listen to the conversation on remote data logging

The Microlink 840 multi-purpose data logger now connects to the Internet-of-Things, WiFi, MQTT and Ethernet networks. Listen to a conversation about what it can do at <a href="https://www.windmill.co.uk/ML840.wav">https://www.windmill.co.uk/ML840.wav</a>



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# This eight-channel, battery-backed, data logger lets you:

- Acquire remote data in real-time
- Monitor analogue signals including pressure, temperature, force, voltage and current
- · Monitor digital sensors like flow meters and
- · Monitor digital status, eg count switch closures
- · Monitor machines, eg record percentage on/off times
- Count: accumulating, frequency, period, pulse width and elapsed time
- · Monitor energy use
- Monitor alarm thresholds and output digital control signals
- Communicate via MQTT, TCP/IP, Ethernet, Internet and WiFi
- Use outside with weatherproof option
- Receive free technical support for life



# **Remote Data Acquisition and Control**

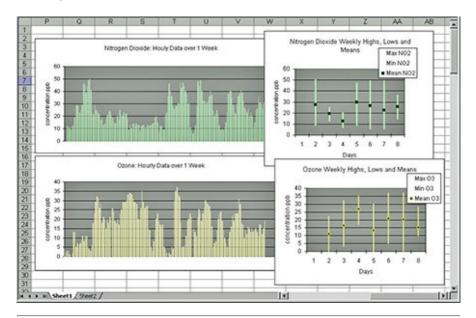
Log data from, and control, a mix of eight digital and analogue signals. Use as a device on the Internet-of-Things via MQTT, plug into a local Ethernet network or use the internet TCP/IP protocol. Monitor and control in real-time. Suitable for mass remote energy monitoring, level detection and status logging making it an incredibly versatile tool.

# **DOWNLOAD LEAFLET**

## **Logging Data**

You can choose the time period over which to store data, every minute or every hour say. For each channel you can save:

- Final value of the logging period, eg total energy used
- Maximum value
- Minimum value
- Average value
- Custom calculations on the data



# Microlink 840 Specifications

Max inputs & outputs

8

Logging epoch

1 minute to 9 hours

Logged values

Maximum, minimum, average and final value of epoch +

custom calculations on data

Counting options

Accumulating, frequency, period, pulse width, elapsed

time

Maximum Over 16 million

On & off time

before a count is Selectable from 1 to 255 millisecs

logged

Count resolution 16- or 32-bit

Analogue input

range

0-3.3 V. Can be made 0-5, 0-10 V or bipolar

Communications MQTT, TCP/IP, Wi-Fi, Internet, Ethernet

Data available in real-time

Find out more - contact <a href="mailto:sales@windmill.co.uk">sales@windmill.co.uk</a>, see <a href="https://www.windmillsoft.com/daqshop/ethernet\_logger.html">https://www.windmillsoft.com/daqshop/ethernet\_logger.html</a>, listen to the <a href="mailto:conversation">conversation</a> or <a href="mailto:downoad the leaflet">downoad the leaflet</a>.

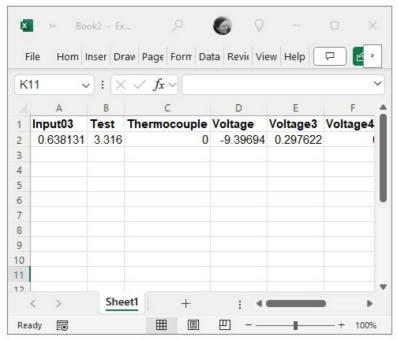
# Your DAQ questions answered: Turning Excel into a Data Logger

#### Question

"I am looking to use the Windmill SW to log data in Excel. Is this software still available and how do I get it?"

#### Answer

It's easy to turn Excel into a data logger with the Windmill DDE Panel software and a simple macro. You can <u>see examples on our website</u>, including to repeatedly samples data from all your RS232, RS485 and Modbus instruments' channels.



Here an Excel macro is used to log data via Windmill DDE Panel and the example software signal generator values

And to get it? Just email monitor@windmillsoft.com for your free copy.

For many more tips on using Excel for data logging, see <a href="https://www.windmill.co.uk/excel/excel-tips.html">https://www.windmill.co.uk/excel/excel-tips.html</a>. Any questions? Email monitor@windmillsoft.com.

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