

.W8.Wireless

- ▶ Recording of wind speed, wind direction and weather data
- ▶ Wireless data download to PC
- ▶ Real-time clock for date and time-stamping of data with battery backup
- ▶ WindSonic sensor compatible
- ▶ MetPak Weather Station compatible
- ▶ SD Card for data storage
- ▶ Raw data logged to .CSV file
- ▶ Ten minute averaged data logged to .CSV file
- ▶ Compact, economical and robust design



Overview

The SpaceLogger.W8.Wireless data logger is optimised for logging real-time wind speed and direction data when using Gill Instruments' WindSonic & WindObserver ultrasonic wind sensors and for logging full environmental data from MetPak weather stations.

Data is stored on a removable SD or SDHC memory card. Current and historic data files may be accessed wirelessly using the SpaceLogger Real-time Communicator Software.

Data is sampled at 1Hz from the connected sensor. Each data record is date and time-stamped when it is stored. A new file (.CSV) is generated for each day's worth of data.

Raw wind & weather data is processed by the logger to calculate 10 minute averaged values with min and max readings during that period. This data set is recorded every 10 minutes in a separate daily .CSV file.

A Wi-Fi wireless local area network (WLAN) is required for remote access to the data stored on the logger. If this is temporarily unavailable, data may be downloaded directly from the SD card to a PC if it is removed from the SpaceLogger.

The SpaceLogger Real-time Communicator Software may connect to multiple loggers within the same WLAN at any time.

The SpaceLogger.W8.Wireless logger requires RS232 input; this may be direct from the sensor or via a WS-15A Display Unit for local display of live weather data. When long cable runs dictate use of RS485, a WS-15A Display or RS485 to

RS232 converter enables connection to the logger.

Configuration of the SpaceLogger for the WLAN is via a simple set-up file written to the SD card.

Applications

Weather, wind speed and wind direction data collection for:

- ✓ Weather monitoring and warning
- ✓ Wind farm surveying and operations
- ✓ Construction industry, including crane operations
- ✓ Education and research projects
- ✓ Aviation operations
- ✓ Health and safety
- ✓ Sports and outdoor activities
- ✓ Agriculture and Horticulture
- ✓ Roads, bridges and tunnels
- ✓ Marine and offshore

Wind Systems

Richard Paul Russell Ltd offers a range of wind systems, weather instrumentation and data loggers. Please contact us for more information.

Contact Us

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SpaceLogger.W8.Wireless Specification

| | | |
|------------------------------------|-----------------------|---|
| Physical | Dimensions | Width: 67 mm Depth: 92 mm Height: 28 mm (excluding optional rubber feet) |
| | Weight | 100g |
| | Enclosure material | GP ABS (UL94-HB) plastic and acrylic |
| RS232 Input | Sensor type | Gill Instruments' WindSonic, WindObserver II and WindMaster ultrasonic wind speed and direction sensors. MetPak, MetPak RG and MetPak Pro weather stations. |
| | Transmission standard | RS232, 8 bits and no parity |
| | Sensor output format | Continuous mode: ASCII UV (or UVW), Polar or Tunnel from all sensors |
| | Transmission speed | 9600 Baud |
| | Connection | 9-way D-type connector, male |
| Wireless Connectivity | Wireless module | Wi-Fi Certified 2.4GHz IEEE 802.11b/g 802.11i Security WPA2-PSK, WPA, WEP |
| | Aerial | Circuit board mounted |
| Data Storage | Data Storage Card | Removable SD or SDHC card |
| | Data Capacity | 4GB (standard) or as per memory card capacity |
| | File System | FAT16 or FAT32 with 8.3 file names. Sector size 512 Bytes |
| | Data logging interval | 1Hz |
| Audible / Visual Indicators | LED Indicators | SD card status: Green: Ready to record data Red: Writing data to SD card Wireless Connectivity Status: Green: Connected to wireless network |
| | Audible Bleeper | Status alert |
| Real Time Clock | Accuracy | ±40 ppm at 25 °C |
| | Backup battery | CR2032 |
| Power | Power requirement | 5 Vdc ±10% |
| | Current at 5Vdc | 200 mA typical |
| | Connection | Micro USB connector |
| Environmental | Temperature Range | Operating: -25 °C to +70 °C Storage: -40 °C to +70 °C |
| | EMC | CE marked - EMC directive 2004/108/EC [Emissions: EN 61326-1:2006 EN 301 489-1 EN 55022:2010 EN 55022:2006 Immunity: EN 61326-1:2006 EN 61000-4-2:2009 EN 61000-4-3:2006] FCC/CFR 47: Part 15:2004 |
| Guarantee | Period | 1 year |

The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change.

Example of SpaceLogger.W8.Wireless Application

