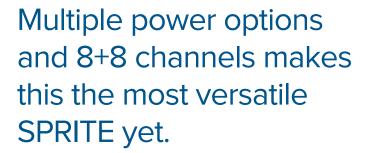


# SPRITE™ i800

8+8 Channel Data Acquisition Hardware



The SPRITE™ i800 is an 8 channel network device which can acquire 8 channels of vibration data in simultaneous banks of 3 and measure 8 DC signals collected one channel at a time. The i800 can be battery operated or connected to a power source. One-year battery life at twice-per-day data acquisition.

The SPRITE i800 is enclosed in a compact and rugged, IP-66 rated enclosure. Other enclosures are available for custom applications. Practically unlimited numbers of SPRITE acquisition devices can be used simultaneously and managed via WATCHMAN Online Systems™ software.

SPRITE is a custom engineered solution designed and installed by Azima DLI certified SPRITE experts.



# **WATCHMAN Online Systems™ Components:**

#### **SOFTWARE COMPONENTS**

- ExpertALERT™ software for configuration, integration, analysis and reporting (local or cloud)
- ALERT Online Engine<sup>™</sup> 3.0 for managing data collection devices and communication
- Sybase SQL Anywhere 12 (full or mini version)
- SPRITE Configuration Utility
- SPRITE Dashboard Utility

### **HARDWARE COMPONENTS**

- SPRITE™ i800 8 Simultaneous ICP Accelerometer plus
   8 Multiplexed DC input acquisition device (supports ICP accelerometer, dynamic, and DC voltage signal ranges +/- 10V)
- Single or triaxial sensors per machine location, wired directly to i800 acquisition device
- Wireless 802.11 standard network connection
- IP-66 rated, NEMA4 enclosure
- WATCHMAN Online Systems server Local network Windows Server (physical or virtual)
- ALERT Database Server Azima DLI Data Center or Local Windows Server (physical or virtual)

#### **OPTIONAL COMPONENTS**

- SPRITE™ i1600 16-channel multiplexed data acquisition device (ICP accel., AC or DC coupled)
- SPRITE<sup>™</sup> i400 4-channel simultaneous data acquisition device, battery-powered, wireless
- Optional: OPC Client Software (scalar information)
- · Optional: Server internet access



WATCHMAN Online Systems is a permanently installed vibration data acquisition system which incorporates data acquisition devices installed close to machines of interest and then communicates to a WATCHMAN Online Systems server through a standard network infrastructure.

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#### **TECHNICAL SPECIFICATIONS**

# **Dynamic Inputs (Channels 1-8):**

No of Channels: 8, simultaneous (banks of 3)

Ranges: +/- 10V

ICP Interface: 2.4mA @ 24Vdc

Other Coupling: AC, configurable per channel

Measurements: Acceleration, displacement, demodulation, velocity via

software integration

Anti-Alias Filter: Compound analog and digital filter

Bias/Gap +/- 25V range for ICP bias voltage and eddy probe gap

Measurement: measurement

Amplitude +-2% typical in passband

Accuracy:

Demod Function: Azima's proprietary Impact Demod

### DC Inputs (Channels 1-8):

No of Channels: 8, multiplexed

Ranges: 0 to +3V and 0 to +10V, jumper selectable
Triggers: One analog/digital, one digital/Namur

# **Processing:**

ADC: 24 bit simultaneous., dynamic channels

16 bit multiplexed, DC channels

Sampling Rate: 64Hz to 102.4kHz (Dynamic Channels)

Bandwidth Ranges: 0.5Hz-25Hz to 0.5Hz-40kHz

Dynamic Range: 96dB (theoretical)
Block Lengths: up to 250,000
Spectral lines: up to 25,600

Indicators:

LCD Display: Backlit LCD, 7 lines x 21 characters

#### **Mechanical:**

Protection: NEMA 4, IP66

Enclosure: Al Si 12 grade (LM24) Die-cast aluminum alloy, external antenna

Dimensions: 26cm x 16cm x 9cm

Cable entry: 16 glands, IP68, 3mm to 6.5mm

Weight: 7.5 pounds (without batteries or antenna)

#### **Environmental:**

Temperature: -20 C to +70 C Compliance: CE, RoHS

#### Power:

Input Power: Battery or DC power (10 to 30Vdc)

Battery Type: Two x lithium 'D' cell type LSH 20 (transportable option available)

Battery Monitor: Internal battery monitor and critical battery shutdown

Isolation: 1500V from DC power input

#### **Communications:**

Network (LAN): 100BaseT Ethernet (CAT5/6)

Network (WLAN): 802.11 b/g/n Wi-Fi compatible

Addressing: Static IP or DHCP

Speed: Up to 54 Mbits/sec (depending on LAN or WLAN)

Encryption: WEP, WPA/WPA2, PSK (TKIP, AES)

Wake-up Mode: Programmable from one minute to one day via software interface

Note: Technical Specifications are subject to change.

EXPERIENCE THE POWER OF WATCHMAN ONLINE SYSTEMS™
AZIMAGLOBAL.COM

Azima's WATCHMAN Solutions™ ensure plants receive results, not mere data. With online systems, it is important your data is managed properly. WATCHMAN Online Systems brings all data together into a centrally hosted data center and applies automated routines to identify anomalies to be further diagnosed and reported. Eliminate false alarms by putting rulebase intelligence and domain expertise into your WATCHMAN Online Systems.

