

No of Channels

Sensor Types IEPE Accelerometer

IEPE Sensor Sensitivity

10, 30, 50, 100, 250, 500 mV/g

ICP Interface

4 mA at 24 Vdc

Bias Measurement

0 to +24 V or 0 to -24 V user selectable

Gain Ranges

1.11.101.201

Anti-Alias Filtering

Stage 1: 50,000 (24 dB/octave with Butterworth slope) Hz

Stage 2: 160,000 Hz

Digital: TBD

Vibration Analysis (Overall)

Acceleration / Velocity Types

Engineering Units

Acceleration: g or mm/s2 Velocity: in/s or mm/s RMS. True Peak, Calculated Peak

Detection Types

Four user-configurable vibration levels:

Alarming

1. Machine OFF 2. OK

3. Warning 4. Alarm

Vibration Analysis (Frequency)

Types

Acceleration / Velocity Acceleration: g or mm/s2 Velocity: in/s or mm/s

Resoution

800 lines

Bands

Six (6) frequency band energy measurements

Measurements

Engineering Units

Measurements

Acceleration g / mm/s2

Velocity in/s mm/s

Digitizing

Multiplexed 24-bit differential analog-to-digital converter

Max Sampling Rate

216,000 Samples/second

Bandwidth Range

2-1000 to 1000-20000 Hz

Communications

Wireless Specifications

Wi-Fi / Wireless IEEE 802.11 b/g

Certification

Standard

FCC / CE / IC/TELEC Open, WPA2-PSK, WPA2-Enterprise

Wireless Security Transmission Rate

1-11 Mbps for 802.11b

Reception Sensitivity

6-54 Mbps for 802.11g

-65 dBm +12 dB

Output Level

1-11 with 5 MHz intervals

Channels

Packet based proprietary protocol

Application Protocol

AES-256 with strong 384-bit ECC key generation

Encryption Integrity and Ubiquity

Protected with multilevel Signature Hash Algorithm

Power

Power Types

External rechargeable battery pack +5 V DC, auxillary power supply

5700 mA/h Lithium Ion

Battery Protection

Temperature protection shutdown 158 °F (70 °C)

Physical

Dimensions

ZARK X8 Housing: $2^{1/6}$ " x $2^{7/16}$ " x $3^{35/64}$ " ($54 \times 62 \times 90 \text{ mm}$) Termination Panel Housing: $3^{15/64}$ " x $2^{1/6}$ " x $3^{5/6}$ ($82 \times 52 \times 92 \text{ mm}$) Battery Box Housing: $2^{3/64}$ " x $2^{61/64}$ " x $4^{21/64}$ " ($52 \times 75 \times 110 \text{ mm}$)

Material

ZARK X8 Housing: Polycarbonate

Termination Panel Housing: Polycarbonate Battery Box Housing: Polycarbonate

Mounting

Connector

Misalignment Protection

Environmental

Operating temperature

-4 °F to +140 °F (-20 °C to +60 °C)

battery charging

Water resistance

Opearting temperature when $\,$ 32 °F to +113 °F (0 °C to +45 °C) $\,$