



# *i-ALERT*<sup>®</sup>2

Equipment Health Monitor



**ITT**

ENGINEERED FOR LIFE

# i-ALERT<sup>®</sup>2

## What it Does:

### Monitor

Tracks vibration, temperature & run-time hours 24/7/365.

### Alarm

Checks every five minutes & alarms if equipment is outside normal operating conditions.

### Trend

Stores data once per hour & on alarm for 30 days. Stores the weekly average, minimum & maximum up to 5 years.

### Analyze

Diagnose machine faults with vibration tools Fast Fourier Transform (FFT) & Time Wave Form Analysis.

### Environment

Rated for any industrial environment. IP67 water & dust resistant. Intrinsically Safe with a 3-year battery life (use dependent).

### Wireless

Sync data via Bluetooth Smart enabled smartphones and tablets.



Spend less time collecting data and more time fixing problems. The i-ALERT<sup>®</sup>2 mobile app has the ability to scan multiple i-ALERT<sup>®</sup>2s within range to quickly and safely inspect multiple machines.

## How it Works:

### 1 ACTIVATE

The i-ALERT devices are light activated by removing the sticker. i-ALERT<sup>®</sup> begins wirelessly broadcasting once activated.



### 2 AUTO CONFIGURATION

i-ALERT2 averages the vibration over 25 hours of run-time and sets the alarm levels to 2 x average (0.08ips minimum). Temperature alarm default to 80°C (176°F).



OR

### 2 MANUAL CONFIGURATION

User manually sets the alarm thresholds via the i-ALERT<sup>®</sup> mobile application.



### 3 MONITOR

i-ALERT checks every 5 minutes. If two consecutive readings are above alarm threshold the i-ALERT will go into alarm.



## Mounting Options:

Mill a slot



Drill & tap



Epoxy<sup>1</sup>



<sup>1</sup>Epoxy not included

# Monitor, Alarm, Trend, Analyze



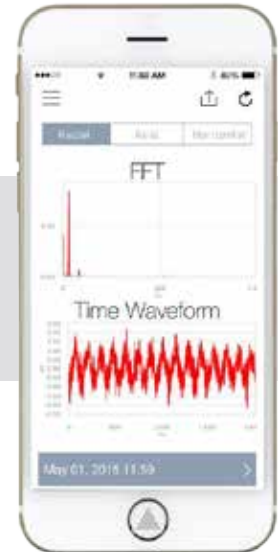
## Dashboard

Simple, intuitive dashboard to track vibration, temperature, run-time & battery life.



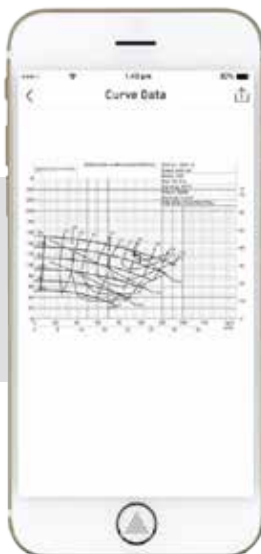
## Trending

Trend vibration, temperature, & kurtosis to monitor any changes in the equipment operation.



## Advanced Tools

Download or request a Fast Fourier Transform (FFT) & Time Wave Form to perform vibration analysis.



## Pump Performance Curve\*

Load the pump performance curve based on the pump serial number.



## Report Generator

Generate a machine health report and send the report via an email.



## Service Locator

Locate and contact the nearest ITT Service Center.

\* Currently available for select ITT Goulds Pumps models

# Technical Specifications

## Dimensions

- 57mm L x 39mm W x 25mm H
- 2.24in L x 1.54in W x 1.04in H



## Measurements

- Temperature
- 3 Axis Vibration (RMS Velocity)
- Kurtosis
- Machine run-time counter
- Fast Fourier Transform (FFT)
- Time Waveform (TWF)

## Sensors

- 3-axis accelerometer  $\pm 16g$
- Frequency range:
  - axial - 10-1,000Hz
  - horizontal - 10-1,000Hz
  - radial - 10-600Hz
- FFT resolution: 1Hz/bin
- Temperature sensor  $-40^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$   
( $-40^{\circ}\text{F}$  to  $+302^{\circ}\text{F}$ )

## Memory

- x,y,z velocity rms, kurtosis, temperature
- Short term: 1/hour for 30 days
- Long term: weekly summary (min,max, average) for 5 years

## Environment

- Ambient temperature:  $-40^{\circ}\text{C}$  to  $+84^{\circ}\text{C}$   
( $-40^{\circ}\text{F}$  to  $+183^{\circ}\text{F}$ )
- IP67 water and dust protected
- Intrinsically Safe
- Class I, II, III, Division 1 Groups C,D,E,F,G
- ATEX Zone 0 AEx ia IIB Ga (Groups C & D)
- RoHS, WEEE, REACH, CE, FCC

## Battery & Power

- 3.6 V Lithium battery
- Life expectancy > 3 years (use dependent)

## Materials

- Shell Material: Nylon 12
- Mounting Stud: 316ss

## Display

- Green LED for unit ON
- Red LED for unit in ALARM
- Blue LED for Bluetooth radio transmitting

## Wireless Syncing

- 2.4 GHz Bluetooth 4.0 Low Energy
- Syncing range: 30m (100 feet)
- Syncing devices: iPhone 4s/5/5s/6/6 Plus, iPad 3/4/Air/Mini, Android coming soon

# Hazardous Rated Devices & Case



pictures courtesy of www.Xciel.com

## Devices

- iPhone 4s/5/5s/6/6 Plus
- iPad 3/4/Air/Mini

## Hazardous Ratings

- CSA Class 1 Division 2 Groups A,B,C,D, T6
- ATEX Zone 2 Ex ic IIC T6 Gc

## Certifications

- ANSI/ISA Std 12.12.01
- ANSI/UL Std 60950-1
- CAN/CSA std C22.2 No. 60950-1
- CSA Std C22.2 No. 213

## Environment

- IP67 (Water / Dust Resistant)
- Humidity 5% to 95% non-condensing
- Operating Temperature  $-4$  to  $102^{\circ}\text{F}$   
( $-2$  to  $39^{\circ}\text{C}$ )

