

### **INDUSTRIES**

MOST EASY, AFFORDABLE & OPEN

ONLINE BEARING LUBRICATION & HEALTH

**MONITORING SYSTEM** 







THE ONTRAK IS A 16 CHANNEL IIOT EDGE ANALYTIC DEVICE DESIGNED TO DELIVER THE EARLIEST WARNING OF BEARING FAILURE AND LUBRICATION ISSUES, REMOTELY.

### **OVERVIEW**







• O ULTRA-TRAK 750 ULTRASOUND TRANSMITTER

O ONTRAK CLOUD





(MODBUS, AWS, AZURE, GOOGLE CLOUD)

#### **MOBILE VIEW**

VIEWABLE ON ANY
NETWORK CONNECTED
DEVICE; PC, LAPTOP,
TABLET, PHONE USING A
STANDARD BROWSER.

#### COMMUNICATION

(ETHERNET, WI-FI OR CELLULAR)



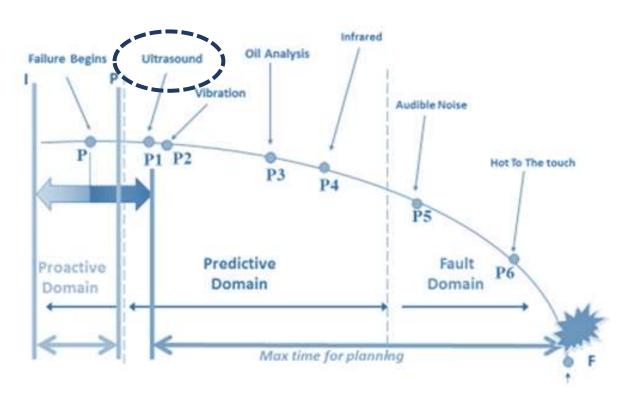
#### **MODULAR SYSTEM**

EACH ON-TRAK IS
CAPABLE OF 16 SENSOR.
EASILY SCALE ON-TRAK
SYSTEMS TO
THOUSANDS OF
SENSORS TO ONE
CENTRAL DASHBOARD



BUILT-IN EVENTS SYSTEM WHICH IS CONFIGURABLE, AND HAS THE ABILITY TO DISPLAY, EMAIL, TEXT ANY ALERTS THE SYSTEM HAS.

## POWER OF ULTRASOUND



"ULTRASONIC MONITORING OF BEARINGS
PROVIDES THE EARLIEST WARNING
OF BEARING FAILURE. AN INCREASE IN
AMPLITUDE OF A MONITORED ULTRASONIC
FREQUENCY OF 12 DECIBELS OVER
BASELINE WOULD INDICATE THE INITIAL
(INCIPIENT) STAGES OF BEARING FAILURE.
THIS CHANGE IS DETECTED LONG BEFORE
IT IS INDICATED BY CHANGES IN VIBRATION
OR TEMPERATURE."



### MONITOR AND TREND DECIBEL LEVELS IN A BEARING WITH ULTRASOUND



ABOVE BASELINE INDICATES A LACK OF LUBRICATION.

ABOVE BASELINE
INDICATES DAMAGE TO
THE BEARING – A FAILURE
MODE BEYOND
LUBRICATION ALONE..

ABOVE BASELINE
MEANS THE ASSET IS
CRITICAL – IT IS CLOSE
TO FAILURE.





AS THE OPERATOR ADDS GREASE, HE OR SHE WILL NOTICE A GRADUAL DROP IN DECIBELS. ONCE THE LEVEL FALLS BACK TO THE BASELINE, **THE BEARING IS SUFFICIENTLY LUBRICATED**.







REDUCE RESOURCE
REQUIREMENTS TO TAKE MANUAL
ROUTE DATA

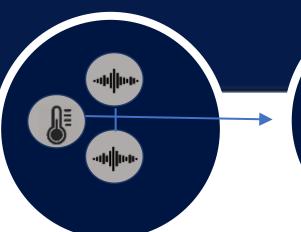
PROVIDE THE EARLIEST WARNING OF BEARING FAILURE.



### ONLINE BEARING MONITORING MADE EASY & AFFORDABLE!



ULTRA-TRAK™ 750 & **OTHER SENSORS** 



**CONNECT THE ULTRA-TRAK 750 & OTHER** SENSORS.

ONTRAK™ IIoT SYSTEM

WI-FI **CELLULAR** 



**PRECONFIGURED WITH 16 CHANNELS. CONNECT TO** THE ON-TRAK CLOUD OR OTHER APPLICATIONS WITH WI-FI, CELL OR ETHERNET

**REAL-TIME DASHBOARD** 

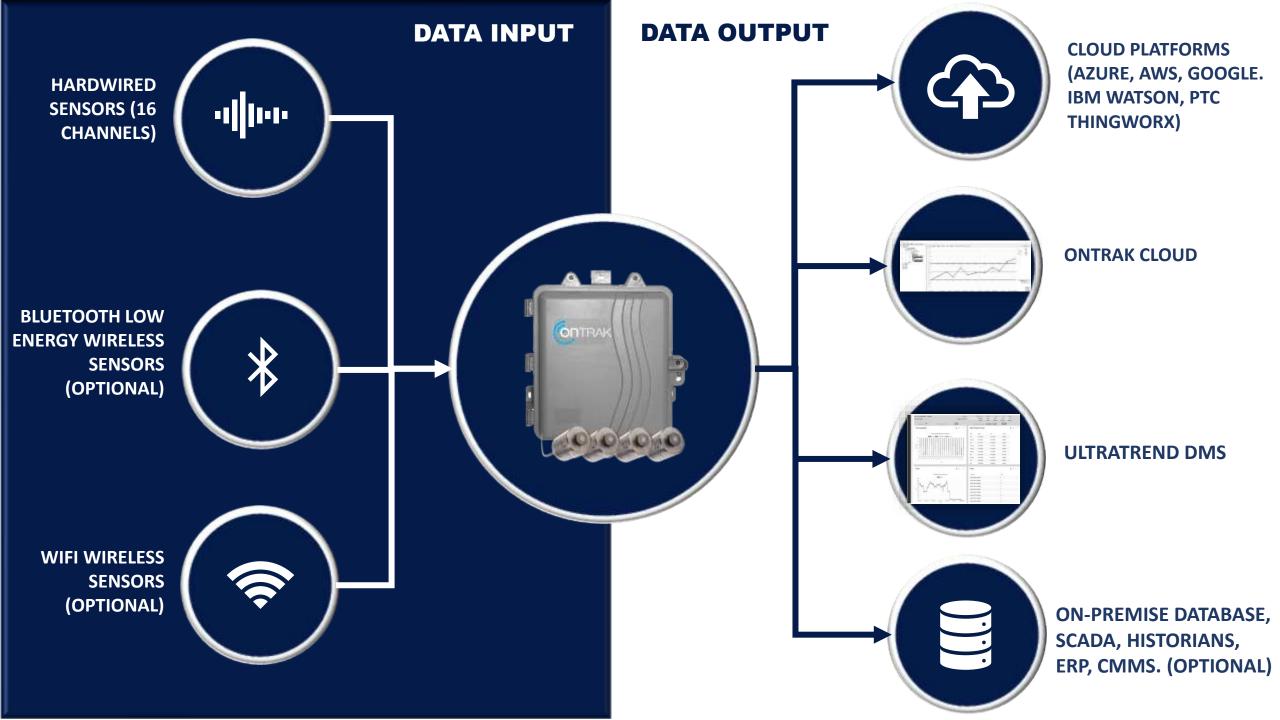


**VIEW SENSOR DATA ON** ANY LAPTOP, TABLET AND PHONE. USE REAL-TIME INSIGHTS TO **MONITOR LUBRICATION** & CONDITION INSIGHTS.

**REAL-TIME ALERTS** 



**GET TEXT AND EMAIL ALERTS BASED ON ANY** CRITERIA YOU CHOOSE.





WITH SNAP-TOGETHER BLOCKS,
THE ONTRAK MAKES IT SIMPLE TO
ADD CONNECTIVITY OPTIONS
EITHER AT THE INITIAL DESIGN OR
FUTURE-PROOF YOUR
INVESTMENT AS TECHNOLOGIES
CHANGE – JUST SNAP OUT THE
OLD AND SNAP IN THE NEW

### COMMUNICATION OPTIONS:





### ETHERNET

USING YOUR PLANT NETWORK, THE ON-TRAK COMMUNICATES TO THE CLOUD OR OTHER APPLICATIONS.

#### WI-FI

IF YOUR PLANT HAS A RELIABLE WI-FI SIGNAL,
THE ON-TRAK CAN COMMUNICATE USING THIS
FEATURE. THIS METHOD ELIMINATED THE NEED
FOR A HARD WIRED CONNECTION.

#### CELLULAR

ELIMINATING THE REQUIREMENT FOR A
CONNECTION INTO THE EXISTING PLANT
NETWORK, CELLULAR IS A COMMON OPTION TO
ELIMINATE NETWORK TRAFFIC AND SECURITY
ISSUES.

### ULTRA-TRAK 750

SYSTEMS INC
The ultrasound approach

THE ULTRA-TRAK 750 IS A CONTINUOUSLY OPERATING ULTRASOUND SENSOR AND TRANSMITTER IN ONE.

READY TO GUARD AGAINST UNPLANNED DOWNTIME AND PRODUCT LOSS THE MINUTE IT IS INSTALLED, THE ULTRA-TRAK PASSIVELY MONITORS ULTRASOUNDS PRODUCED BY MECHANICAL EQUIPMENT IN REAL-TIME





### SYSTEMS INC

### FEATURES

- ONE SENSORS COVERS AN ENTIRE BEARING, NO NEED FOR ADDITIONAL SENSORS ON DIFFERENT AXIS.
- CONTINUOUSLY MONITORS MACHINERY IN REAL-TIME
- DETECTS MECHANICAL FAULTS AND PROVIDES EARLY WARNING OF BEARING AND GEAR FAULTS.
- PREVENTS LUBRICATION ISSUES WITH THE DETECTION OF LACK OF LUBRICATION AND PREVENTS OVER-LUBRICATION.

### STUD MOUNTING



THE ULTRA-TRAK 750





- PREPARE THE MOUNTING SURFACE
- MIX THE EPOXY INCLUDED WITH THE KIT AND APPLY
- PRESS THE MOUNTING KIT UNTIL IT CLICKS
- WAIT 10 -15 MINUTES
- REMOVE THE PLASTIC MOUNTING KIT FROM THE STUD

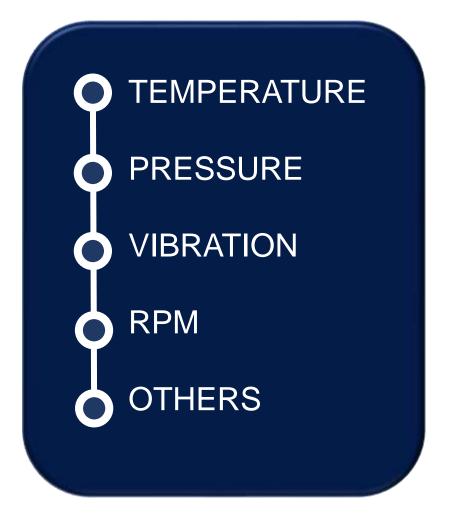


OPTIONAL THERMO ISOLATION
DEVICE FOR HIGH TEMPERATURE
APPLICATIONS

### SENSING TECHNOLOGIES

THE ON-TRAK SYSTEM IS COMPATIBLE WITH MOST ANALOG SENSORS AND TRANSMITTERS.

ADD ADDITIONAL SENSING
TECHNOLOGY TO THE ON-TRAK SYSTEM
TO COMPLIMENT THE ULTRASOUND
READING.





# ONTRAK REQUIRES FEWER CABLES AND INSTALLATION TIME THAN TRADITIONAL CONDITION MONITORING SYSTEMS.



### PRE-BUILT, CONFIGURABLE DASHBOARDS



- USE ONTRAK CLOUD
  DEVICE MANAGEMENT TO
  SEE THE STATUS OF ALL
  YOUR CONNECTED
  SYSTEMS AND REMOTELY
  DEPLOY CHANGES.
- ALL DATA SENT TO THE ONTRAK CLOUD DASHBOARD IS
  TIMESTAMPED AND SAVED IN
  A DATABASE FOR VIEWING
  IMMEDIATELY, GENERATING
  REPORTS, AND EXPORTING
  TO CSV FILES FOR
  IMPORTING TO
  SPREADSHEETS.
- SELECT FROM A MENU OF VISUALIZATION WIDGETS (FOR EXAMPLE, SINGLE VALUE, LINE CHARTS, TABLES).

### LIMITLESS DASHBOARDS





O CREATE UNLIMITED
NUMBER OF
DASHBOARDS
USING DRAG AND
DROP WIDGETS TO
BEST PROVIDE
REAL-TIME INSIGHTS

### **PRESCRIPTIVE**



#### **LUBRICATION AND HEALTH INSIGHTS**

2.7

15

LUBRICATION REQUIRED

BEGINNING OF FAILURE

16dB above baseline indicates damage to the bearing – a failure mode beyond lubrication alone.

**CLOSE TO FAILURE** 

35dB above baseline means the asset is critical – it is close to failure.

8dB above baseline indicates a lack of lubrication.

**HEALTHY BEARING** 

**Do Nothing!** 

#### **VIEW BOTH**

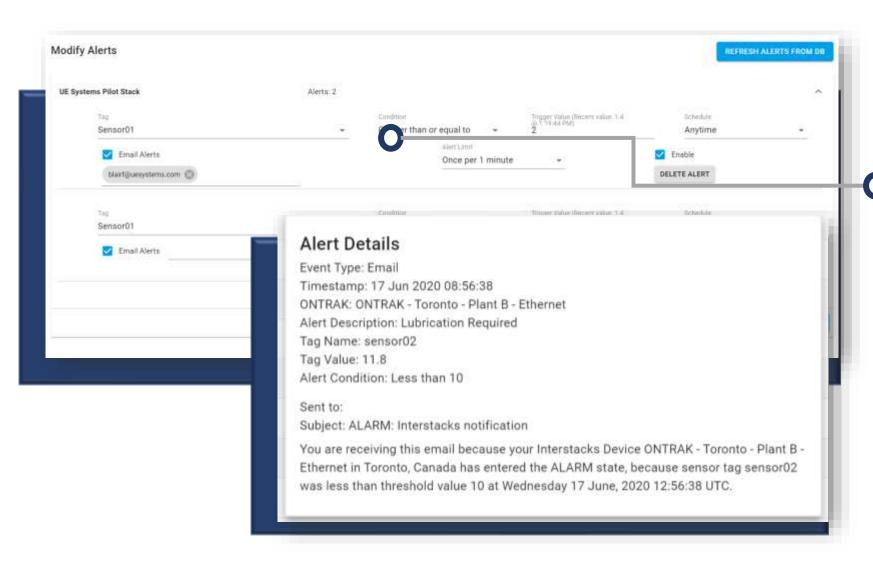
### REAL-TIME AND HISTORICAL TRENDS



### **DEFAULT AND CUSTOMIZABLE**

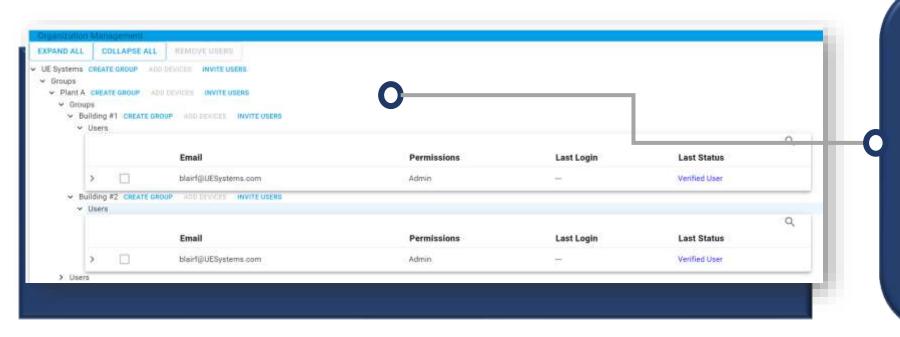


### **CONDITIONAL ALERTS**



Text and email alerts can be sent based on criteria you select. Pre-built alerts for lubrication, early onset of failure and critical failure come standard.

### MANAGE ALL YOUR DEVICES AND USERS FROM ONE INTERFACE.



Admin users create sub-groups in an arbitrarily deeply nested hierarchy representing your existing organization.



### STARTER KIT



ONTRAK SYSTEM (AVAILABLE WITH CELL, WI-FI OR ETHERNET CONNECTION.

UP TO 16 X ULTRA-TRAK 750 SENSORS

PRE-CONFIGURED FROM FACTORY WITH YOUR SPECIFICATIONS.

PRE-BUILT DASHBOARDS AND ALERT CATEGORIES

1 YEAR OF ONTRAK CLOUD

TECHNICAL SUPPORT & REMOTE EXPERT DIAGNOSTICS



# ONTRAK SMARTSTART PROGRAM<sup>TM</sup>

UE SYSTEMS IS FOCUSED ON ENABLING OUR CUSTOMERS TO OPTIMIZE THEIR ONLINE MONITORING SOLUTION ADOPTION AND GROWTH. FROM GETTING YOUR FIRST SYSTEM RUNNING TO HELPING YOU EXPAND THE SOLUTION ACROSS YOUR ORGANIZATION. WE ARE COMMITTED TO ENSURING YOUR SUCCESS.

THIS IS WHY WE'VE DESIGNED OUR CUSTOMER SUCCESS PROGRAM AROUND FOUR CORE PILLARS.

- HARDWARE INSTALLATION SUPPORT
- SOFTWARE INSTALLATION SUPPORT
  - DATA & ALERT CONFIGURATION/OPTIMIZATION
  - TRAINING & TROUBLESHOOTING







# ONTRAK IIOT EDGE ANALYTIC DEVICE

DESIGNED TO REMOTELY MONITOR YOUR BEARINGS AND LUBRICATION CONDITION 24/7.

- ELIMINATE PREMATURE BEARING FAILURE
  THROUGH ULTRASOUND GUIDED LUBRICATION
- REDUCE MANPOWER REQUIREMENTS TO TAKE MANUAL ROUTE DATA
- PROVIDE THE EARLIEST WARNING OF BEARING FAILURE.