

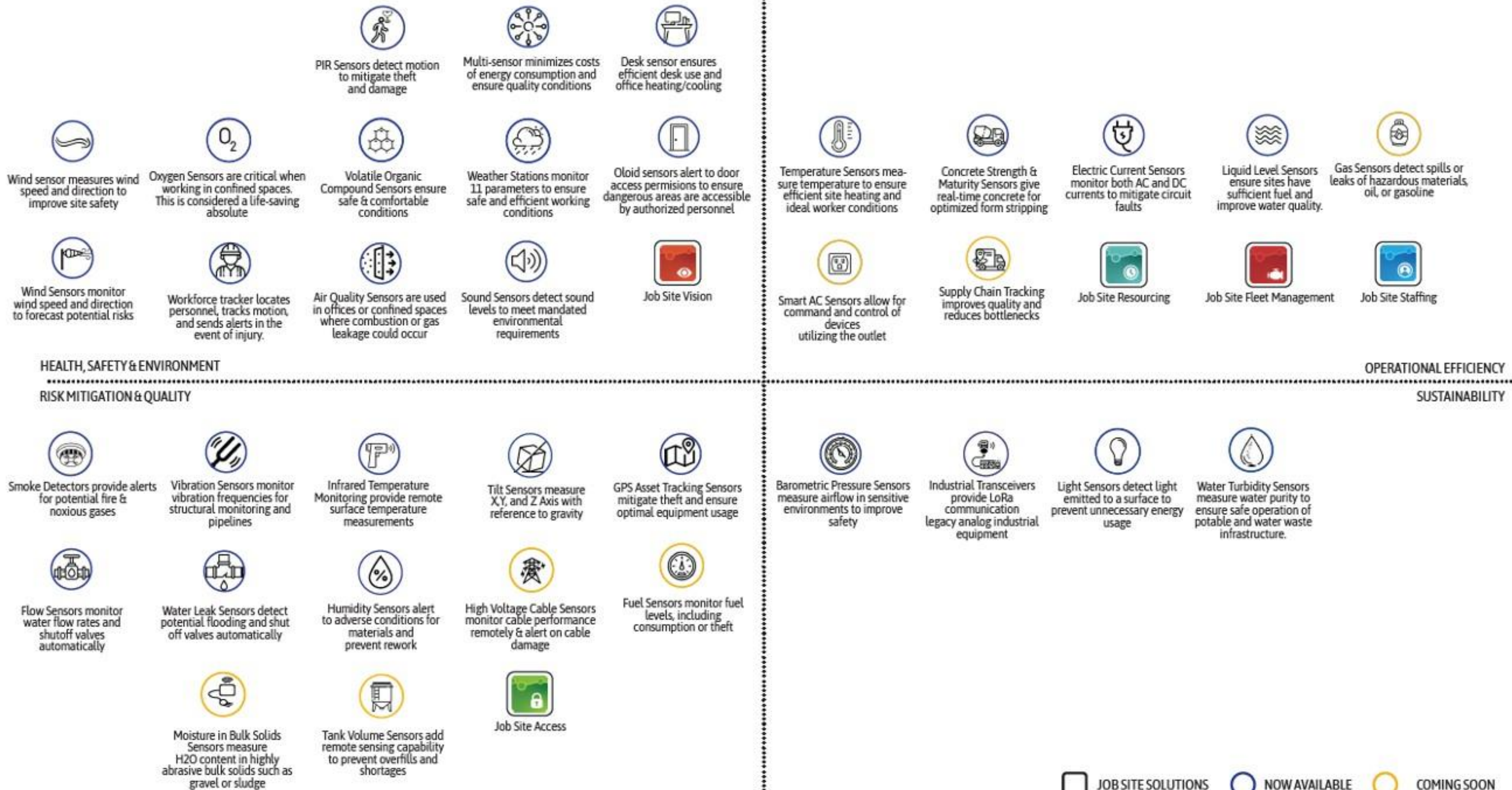
# **SMART** SENSOR GUIDE

REAL-TIME DATA. REAL TIME RESULTS.

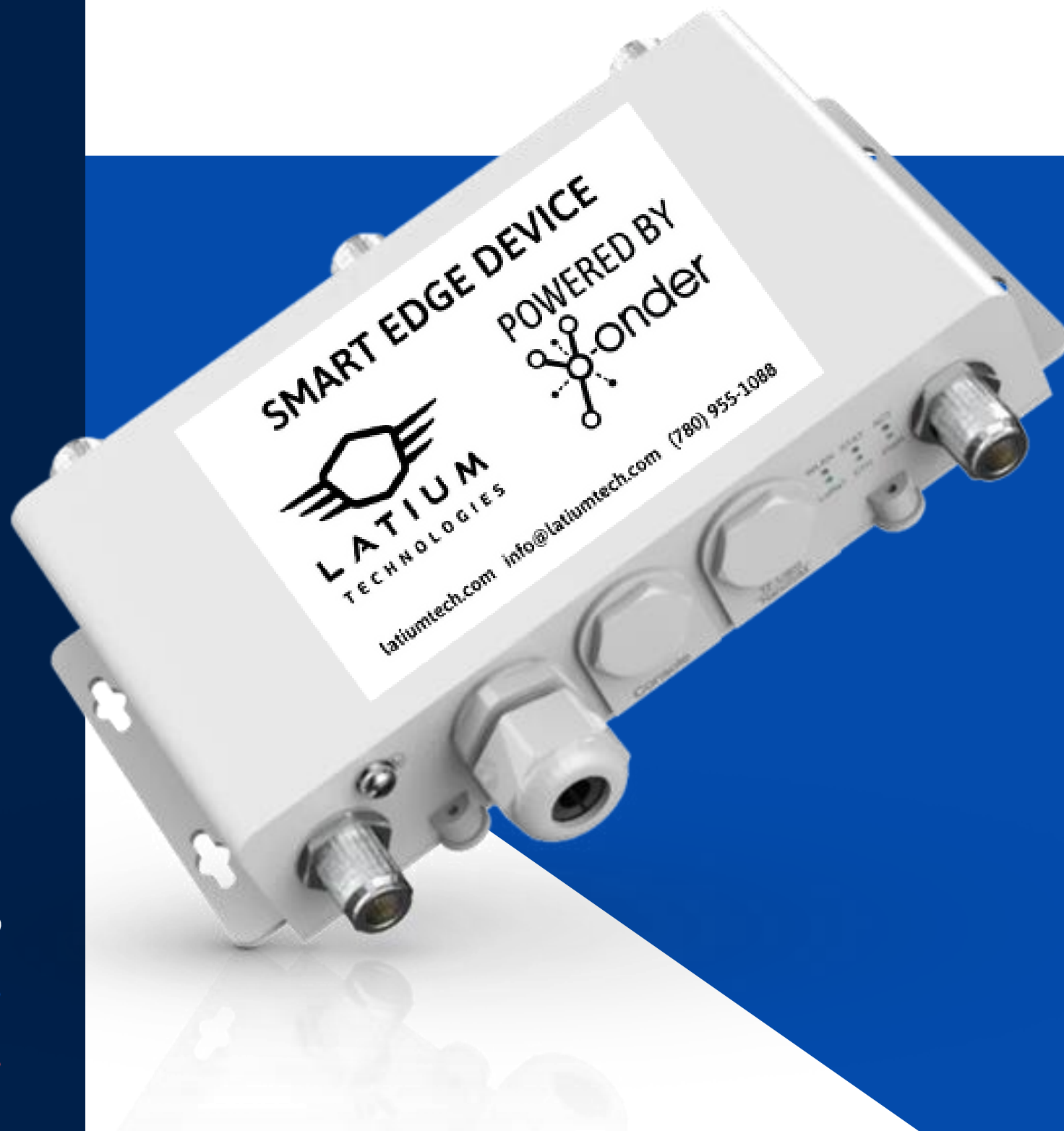


**JOB SITE  
INSIGHTS**





# SMART EDGE DEVICE



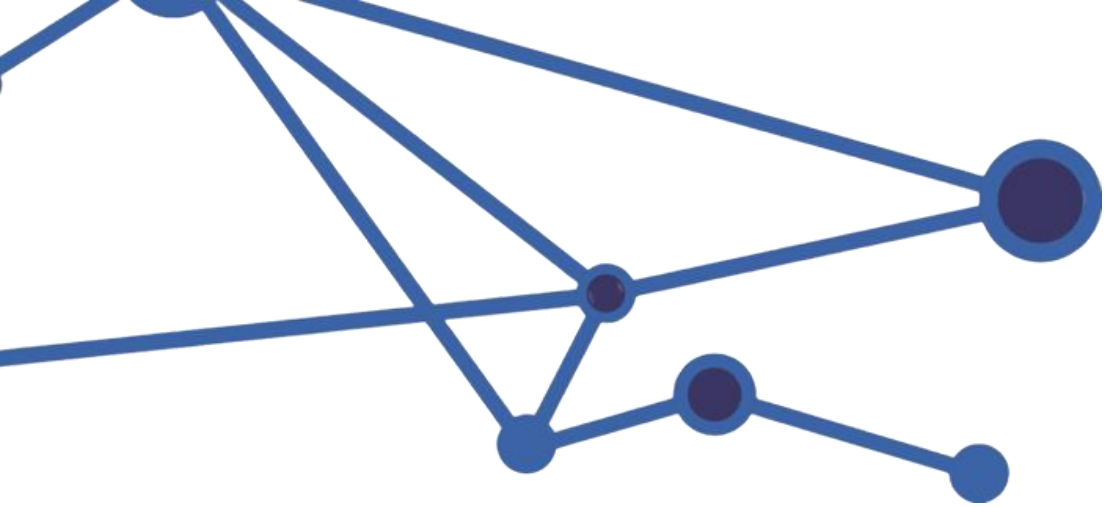
## DEVICE FEATURES:

- The "hub" **captures** and **analyzes** sensor data from connected assets over long distances (up to 10km/6miles.)
- Multiple communication options including Cellular, Wi-Fi, Ethernet, and Sattelite.

## BENEFITS:

- Simplifies job site IoT infrastructure due to the wide range of integrated sensors.





# SMART EDGE DEVICES

## INDOOR SMART EDGE DEVICE

\$100/month

Transmits sensor data via LTE or Wi-Fi to the JSI Cloud.



[CLICK HERE](#)



## OUTDOOR SMART EDGE DEVICE

\$160/month

Transmits sensor data via LTE to the JSI Cloud.

For sites without an internet connection.

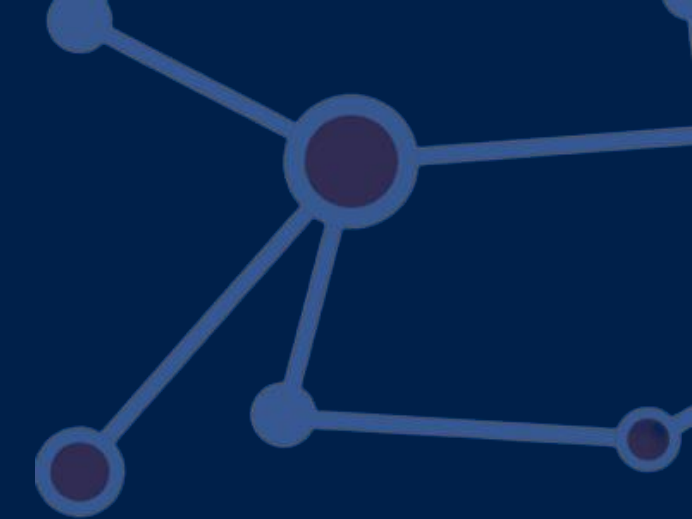
Ruggedized for outdoor applications.



[CLICK HERE](#)



# AIR QUALITY MONITORING



## APPLICATIONS:

- Used in infrasture or any confined spaces where combustion or gas leaks could occur.
- Provides control for good air quality and energy savings.
- Used in agriculture storage and transportation.

## BENEFITS:

- Ensure comfortable environmental conditions in finished structures and alert personnel to changing conditions that could impair occupant comfort and safety.
- Measures conditions in confined spaces for worker safety.



# AIR QUALITY MONITORING DEVICE

## IAQ SENSOR TYPE-1D

### MEASURES:

- CO2 concentrations
- Volatile organic compounds (VOC)
- Temperature
- Humidity
- Barometric pressure
- Ambient light, motion or presence



CLICK HERE



# ○ CONCRETE STRENGTH AND MATURITY



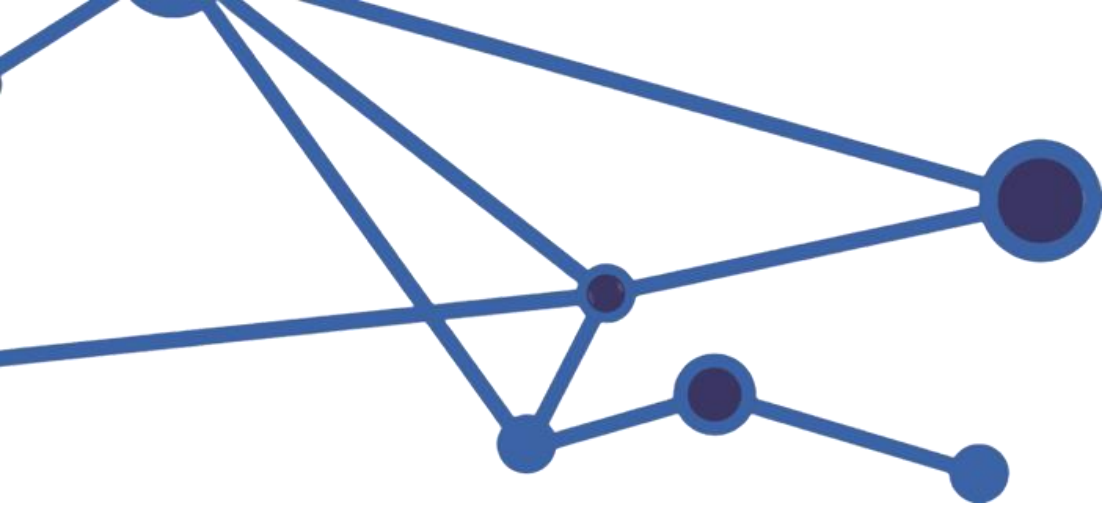
## APPLICATIONS:

- Accelerate formwork removal
- Control quality in the field
- Speedup post-tensioning

## BENEFITS:

- Reduces third-party concrete testing costs and time-consuming manual testing procedures that delay formwork stripping.
- A 55-level condominium/hotel project eliminated 1,100 hours from its formwork stripping and concrete pouring schedule.





# CONCRETE STRENGTH AND MATURITY DEVICES



## CONCRETE SENSOR TYPE-1G

\$50/Month and \$338 One-time purchase

- Maturity
- Strength
- Temperature



CLICK HERE



## CONCRETE SENSOR TYPE-2M

- Maturity
- Strength
- Temperature



CLICK HERE





# ELECTRICAL MONITORING



## APPLICATIONS:

- Monitoring industrial process control outputs.
- Monitor signaling to control valves.
- General monitoring of a 4-20mA industrial output

## BENEFITS:

- Monitor and alert to equipment usage and efficiency to reduce downtime and adverse operational conditions.



# ELECTRICAL MONITORING DEVICES

## CURRENT SENSOR TYPE-1RB



### MEASURES:

- Monitor the strength of electricity flowing through a system to protect site personnel from harm and prevent circuits from overheating.

[CLICK HERE](#)



## VOLTAGE SENSOR TYPE-1RB



### MEASURES:

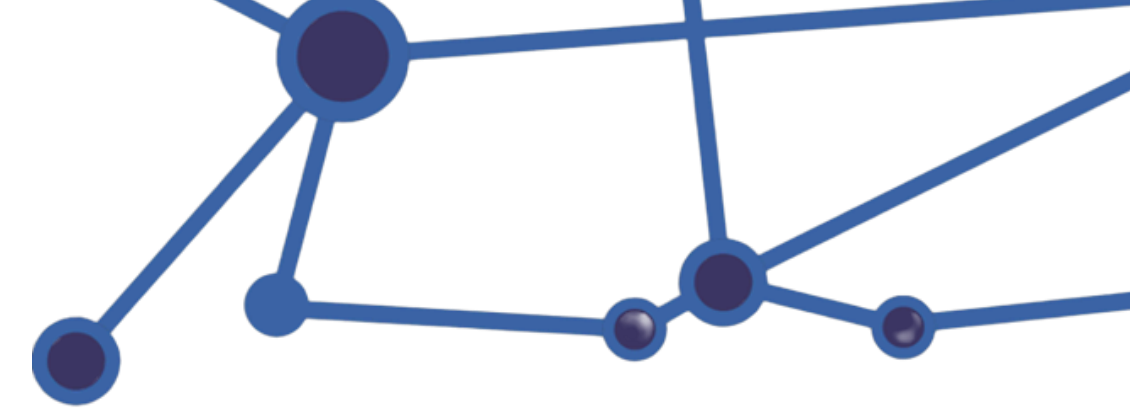
- Measures voltages between 0 to 30 Volts in motors, electrical circuits, and electrical panels.

[CLICK HERE](#)





# ASSET TRACKING & SECURITY



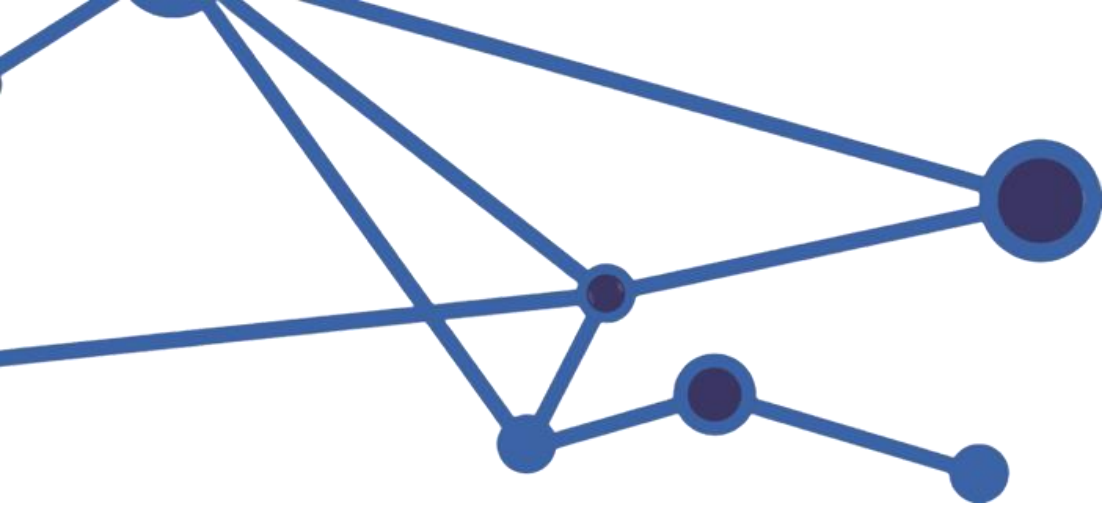
## APPLICATIONS:

- Smart Industry
- Smart city
- Motor preventive maintenance

## BENEFITS:

- Enables job site personnel to quickly locate items on a job site map, saving time/cost spent searching for and locating items.
- During off-hours, equipment movement is immediately detected, ensuring assets are not being stolen or moved without authorization.





# ASSET TRACKING & SECURITY DEVICES



GPS SENSOR  
TYPE-1DR

Location of site personnel



CLICK HERE



GPS SENSOR  
TYPE-1L

\$65/month

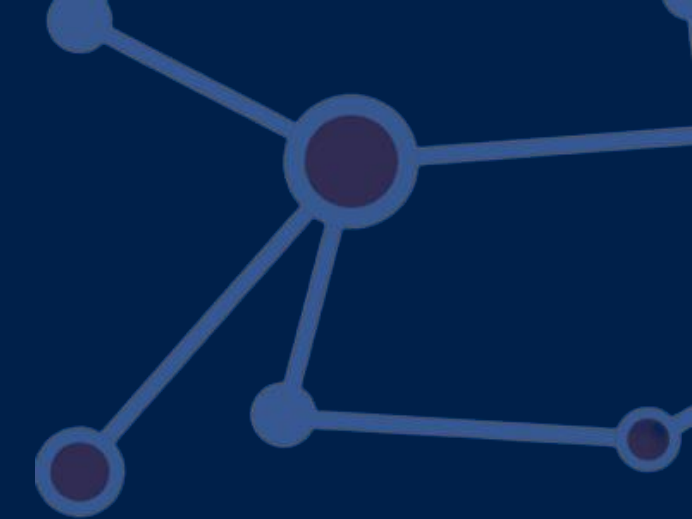
GPS location of assets



CLICK HERE



# SMOKE DETECTION & FIRE PROTECTION



## APPLICATIONS:

- Residential
- Retail & Warehouses
- Schools

## BENEFITS:

- Fire smoke sensors detect and alert to combustible gases, reducing risks associated with site/building evacuation.
- Monitor ongoing issues through combustible gas incident reporting to ensure equipment is operating safely.



# SMOKE DETECTION & FIRE PROTECTION DEVICE

## SMOKE SENSOR TYPE-1P

### MEASURES:

- Smoke
- Combustible gas



CLICK HERE



# ENVIRONMENTAL MONITORING



## APPLICATIONS:

- Indoor and outdoor use
- Non-hazardous locations
- Temperature control

## BENEFITS:

- Ensures finishing materials are maintained, and installation work is completed, within proper temperature and humidity ranges.
- Cold weather heating costs and energy consumption are reduced by continuously monitoring job site temperatures to maintain optimal temperatures and heater operation.
- Alerts job site personnel to conditions that damage water infrastructure.



# ENVIRONMENTAL MONITORING DEVICES



ATMOSPHERIC  
SENSOR TYPE-  
1M

- Air temperature
- Relative humidity
- Air pressure
- Lighting levels

CLICK HERE



STACKABLE  
SENSOR TYPE-  
1L \$115/month

- Ambient light
- Air pressure
- Humidity
- Temperature
- Water leaks
- Oxygen

CLICK HERE



STACKABLE  
SENSOR TYPE-  
2L \$39/month

- Ambient light
- Air pressure
- Humidity

CLICK HERE



TEMPERATURE  
SENSOR TYPE-  
1D

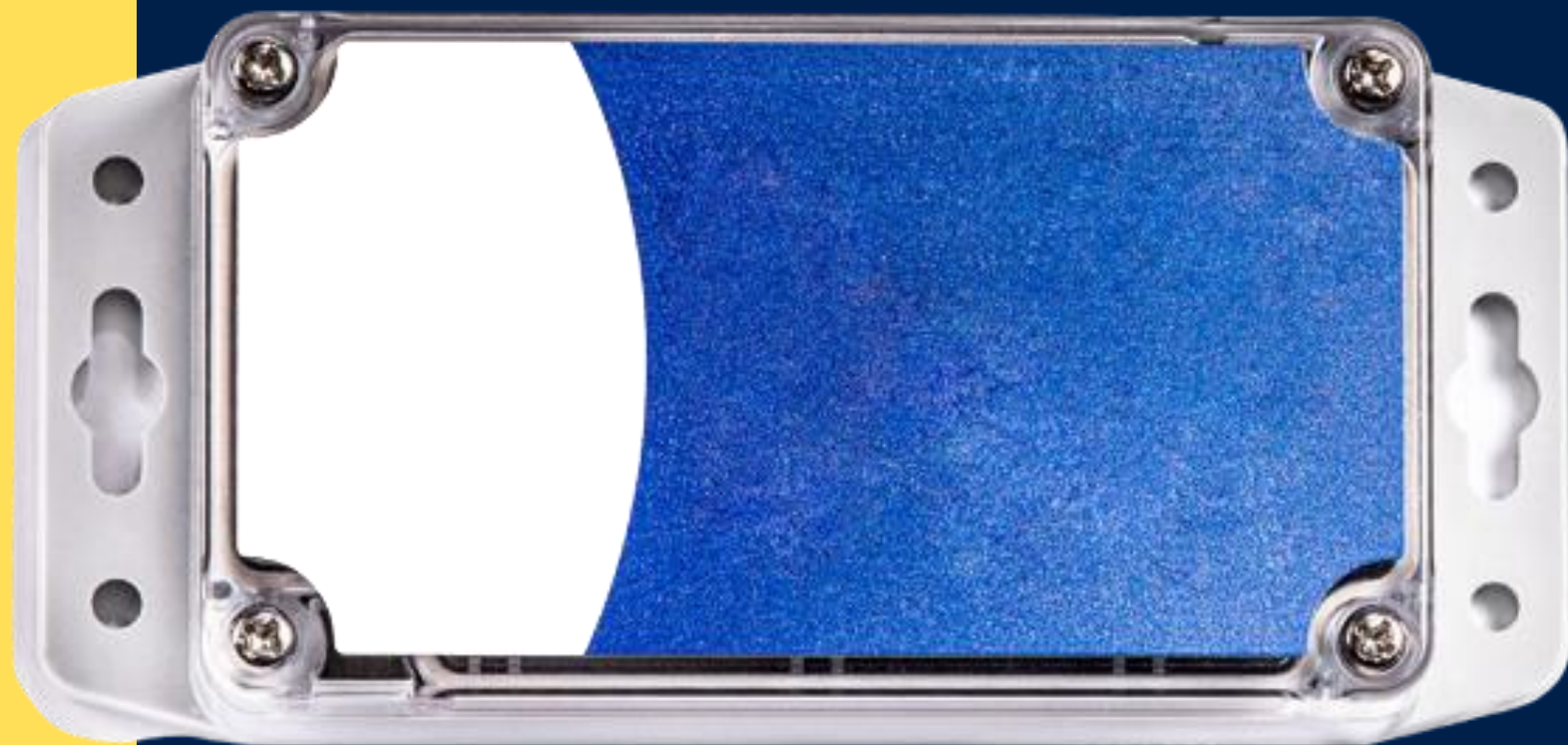
- Surface temperature

CLICK HERE





# INDUSTRIAL TRANSCIVER



## APPLICATIONS:

- Monitoring industrial process control outputs.
- Monitor signaling to control valves.
- General monitoring of a 4-20mA industrial output

## BENEFITS:

- Convert an analog signal for legacy industrial equipment to a LoRa signal to be ingested by JSI.



# INDUSTRIAL TRANSCEIVER DEVICE

## ANALOG TRANSCEIVER TYPE-1RB

### MEASURES:

- Converts an analog signal from a non-LoRa device into a LoRa signal that can be received in JSI.

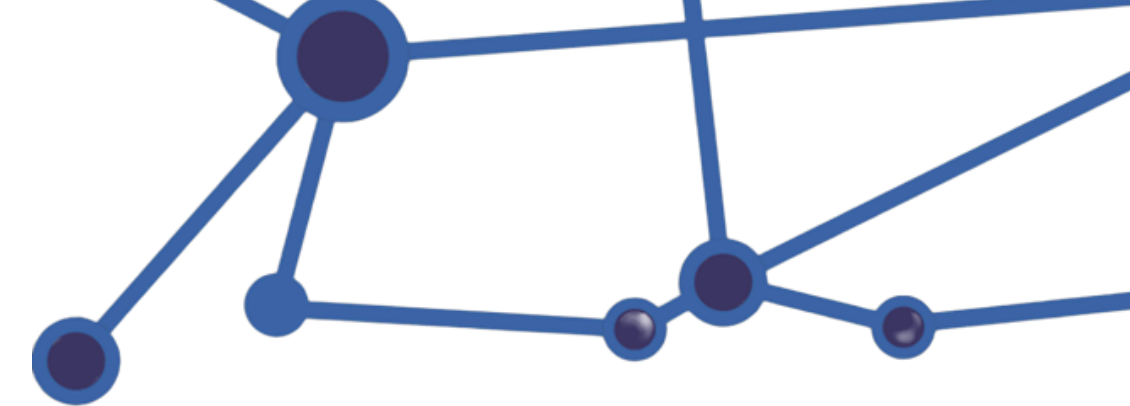


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# FLOOD DETECTION & LIQUID MEASUREMENT



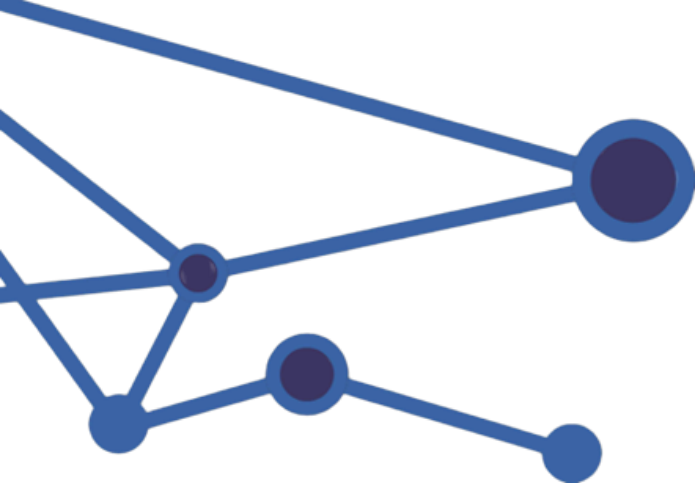
## APPLICATIONS:

- Detect basement flooding
- Broken or leaking plumbing
- Frozen water pipe detection
- General water or liquid sensing

## BENEFITS:

- Automatically turn off water valves when water is detected to avoid costly rework and equipment replacement that impairs build quality and schedule.
- Monitor water usage across the entire asset.





# FLOOD DETECTION & LIQUID MEASUREMENT DEVICES



LIQUID LEVEL  
SENSOR TYPE-  
1D

- Water level of open water, volume of fill tanks, and groundwater level

CLICK HERE



LIQUID LEVEL  
SENSOR TYPE-  
2D

- Water level of pipelines and volume of fill tanks
- Temperature

CLICK HERE



TURBIDITY  
SENSOR TYPE-  
1D

- Measures turbidity and temperature

CLICK HERE



# FLOOD DETECTION & LIQUID MEASUREMENT DEVICES



WATER SENSOR  
TYPE-1B

- Detects water or other liquids.
- Probe Type Sensor

CLICK HERE



WATER SENSOR  
TYPE-1E

- Detects water on ground level.
- Puck Type Sensor

CLICK HERE



WATER SENSOR  
TYPE-2E

- Detects water or other liquids.
- Probe Type Sensor

CLICK HERE



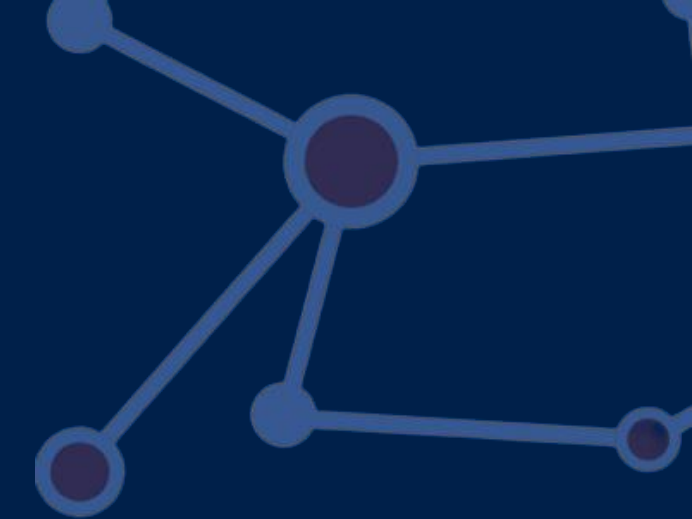
WATER SENSOR  
TYPE-3E

- Detects water or other liquids.
- Rope Type Sensor

CLICK HERE



# SOUND LEVEL MONITORING



## APPLICATIONS:

- Smart industry
- Smart city
- Motor preventive maintenance

## BENEFITS:

- Sound sensors monitor and alert to sound levels exceeding acceptable levels specified by the jurisdictions in which job sites are located.
- Ensures general contractors comply with noise regulations and laws.



# SOUND LEVEL MONITORING DEVICES

## SOUND SENSOR TYPE-1P-I INDOOR

### MEASURES:

- Sound frequency



CLICK HERE



## SOUND SENSOR TYPE-1P-O OUTDOOR

### MEASURES:

- Sound frequency



CLICK HERE



# VIBRATION, TILT & MOTION DETECTION



## APPLICATIONS:

- Smart industry
- Smart city
- Motor preventive maintenance

## BENEFITS:

- Alerts to anomalous movement in structures (e.g. retaining walls, shoring structures) that can potentially lead to structural failures and alerts of any undesired movement.
- Can be used to predict equipment failure and downtime which impacts operations, productivity and schedules.





# VIBRATION, TILT & MOTION DETECTION DEVICES



MOTION  
SENSOR TYPE-  
1P

- Presence detection

CLICK HERE



TILT SENSOR  
TYPE-1RB

\$80/month

- Measures vertical orientation

CLICK HERE



VIBRATION  
SENSOR TYPE-1L

\$65/month

- Measures vibration

CLICK HERE



VIBRATION  
SENSOR TYPE-1T

- Measures frequency of vibration

CLICK HERE



# WEATHER STATION



## APPLICATIONS:

- Outdoor remote monitoring
- Meteorology
- Urban heat islands
- Frost alarming
- Microclimate
- Building automation

## BENEFITS:

- Weather stations improve job site safety & awareness by alerting job site personnel about adverse or dangerous weather conditions.
- Weather station data collected by the JSI platform provides data telemetry that validates and supports weather delay claims.



# WEATHER STATION DEVICES

## WEATHER SENSOR TYPE-1BA



### MEASURES:

- Measures windspeed and direction

CLICK HERE



## WEATHER STATION TYPE-1D



### MEASURES:

- Temperature
- Humidity
- Precipitation
- Lightning strikes
- Wind gusts
- Solar radiation
- Wind speed max
- Tilt angle x-orientation
- Tilt angle y-orientation

CLICK HERE



# CONTACT US FOR MORE INFORMATION



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