Smart connected fire sprinkler solutions – Campus Coffee Break

Powering the blueprint of the future

The power behind your mission
System failure can happen **without warning** putting end-user out of compliance and **causing $ losses** or loss of reputation (= $ loss)!
Benefits of a connected fire sprinkler system

- Real-time asset health monitoring
- Reduce service-related downtime
- Decrease annual repair costs
- Proactive approach to maintenance
- Increase operational efficiency
- Improve risk management
# System capabilities

<table>
<thead>
<tr>
<th></th>
<th>Wet</th>
<th>Dry</th>
<th>Pre-Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Temperature Monitor</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Water Pressure</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DPV Monitor</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>▪ Air Pressure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Compressor Pressure</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Low Point Monitor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Water presence)</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Advanced notice:**
- System trips
- Presence of water
- Freeze-ups
- Leaks/corrosion
Smart Connected Fire Sprinkler System

Benefit features
- Real-time asset health monitoring
- Reduce service-related downtime
- Decrease annual repair costs
- Proactive approach to maintenance
- Increase operational efficiency
- Improve risk management

Gateway
- A scalable cellular communications gateway for industrial IoT applications
- A cellular modem that is the central hub for all sensors in the building
- Utilizes LoRa radio technology for reliable, long range radio communication to sensors
- Cellular network removes customer security risk by staying independent of their IT infrastructure, eliminating customer IT support

Dry/Preaction Valve Kit
- Sensors measure water supply pressure, system pressure and compressor pressure data
- Utilizes LoRa radio protocol to communicate data from sensors
- Immediately sends data if a 2 psi or two-degree change is sensed

Low Point Kit
- Monitors presence of water in low point drains, temperature, as well as temperature in the pipe
- Low-profile design with one inch and one-half inch NPT pipe plug
- Integrated thermistor monitors temperature

Temperature Kit
- Monitors pipe temperature where the temperature probe touches the pipe
Dashboard

- Gives quick overview of system alerts and immediate action needed
- Click on any alert to view detailed data
Dashboard

Shows latest recorded data point of monitored parameters

**DRY PIPE MONITORING**

<table>
<thead>
<tr>
<th>Name</th>
<th>Battery Status</th>
<th>Air Temperature</th>
<th>Water Pressure</th>
<th>Air Pressure</th>
<th>Comp res</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP-River 1</td>
<td></td>
<td>72.3°F</td>
<td>74.2 PSI</td>
<td>61.5 PSI</td>
<td></td>
</tr>
</tbody>
</table>

Clicking arrow shows more detailed data

**LOW POINT MONITORING**

<table>
<thead>
<tr>
<th>Name</th>
<th>Battery Status</th>
<th>Air Temperature</th>
<th>Pipe Temperature</th>
<th>Water Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP-Pump Shed</td>
<td></td>
<td>76.1°F</td>
<td>75.7°F</td>
<td>Water Detected 6 minutes ago</td>
</tr>
<tr>
<td>LP-River Closet 65-1F</td>
<td></td>
<td>75.6°F</td>
<td>75.5°F</td>
<td>Dry 30 minutes ago</td>
</tr>
</tbody>
</table>

Indicates any presence of water in low point drain

Help feature has tutorials to walk you through how to do items

OpenBlue
Dashboard

- Gives users a personalized view of their system status
- Can be used for troubleshooting and post event investigation
Mobile App

- View Alerts from Mobile App
- Investigate Specific Events
- View Multiple Sites from Single Pane Screen
- View Event History
College Stadium Installation

- Compressor Manifold
- Dry Pipe Pressure Kit
- Water & Air Sensor
- Low Point Sensor
THANK YOU!