

CISCO *Live!*



#CiscoLive



The bridge to possible

# Hazardous Location Wireless, Expanded

Anthony Savaglio // Product Manager // IoT Wireless  
Ali Samioglu // Leader, Systems Engineering // GVS-SE MEA

BRKIOT-1086



#CiscoLive

# Cisco Webex App

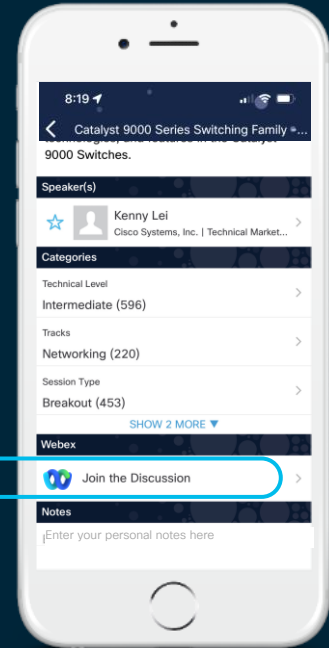
## Questions?

Use Cisco Webex App to chat with the speaker after the session

## How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 17, 2022.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKIOT-1086>



# Agenda

- Introduction
- Industrial Wireless overview
- HAZLOC & modularity
- Honeywell OneWireless & Emerson 1410S
- Wipelot EagleEye
- Conclusion

# Industrial Wireless Overview



# Industrial wireless is growing



# 35%

IoT Wireless  
Annual Growth  
FY15-21

# Coverage for every need



# Cisco Catalyst IW6300 Heavy Duty Series Access Points





# Cisco Catalyst IW6300 Heavy Duty Series Access Points

Purpose-built for Class I Division 2 hazardous environments



Flexible connectivity:  
Three PoE and one SFP port



AC/DC and PoE-in for power redundancy



Intelligence beyond boundaries:  
IOx, compute at the IoT edge



Lightweight, compact design  
built for simpler deployments in  
extreme temperature ranges



IoT modules for enhanced  
capabilities



Resilient mesh architecture  
support based on 802.11 AC  
Wave 2



Cisco end-to-end security  
including ISE

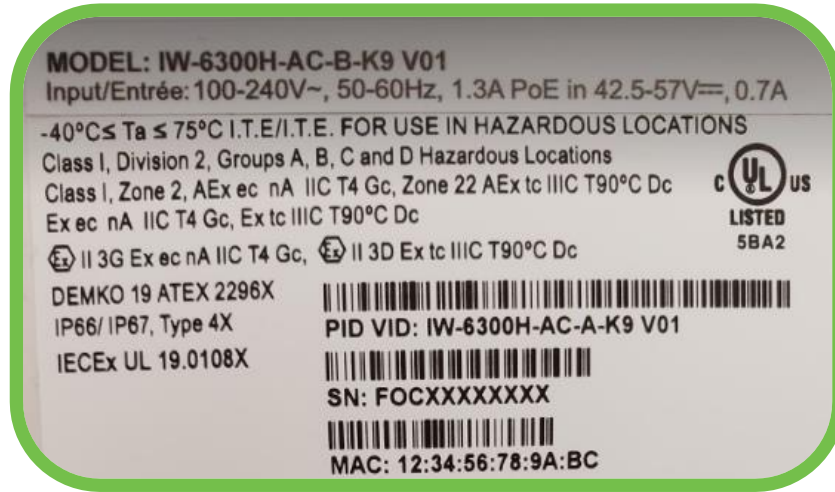


Extend intent-based networking to hazardous environments

# HAZLOC & Modularity



# Class I, Division 2...



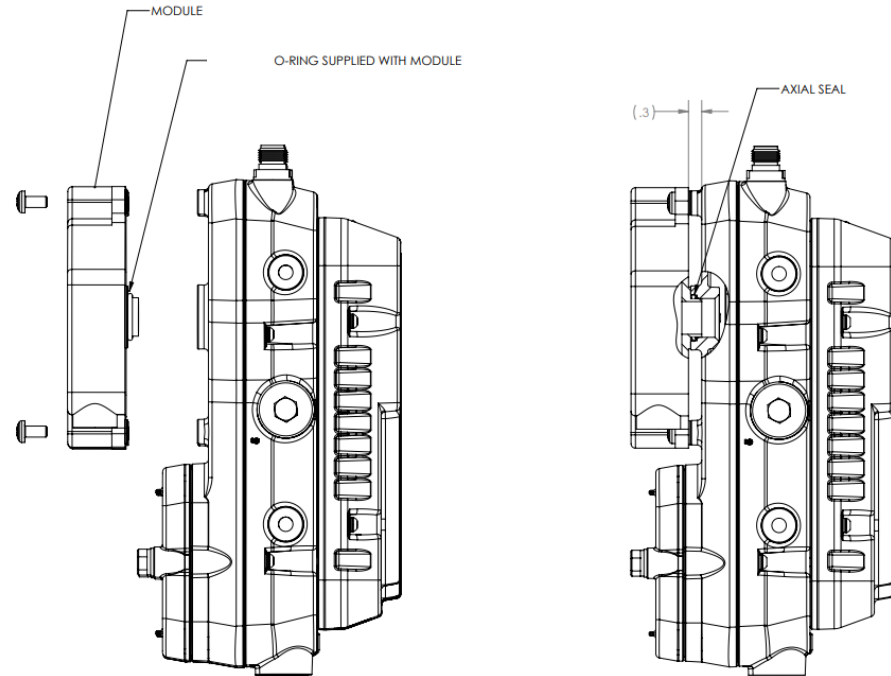
...is the US designation.

“Class I: Flammable gases, flammable liquid-produced vapors, and combustible liquid-produced vapors

Division 2: Ignitable concentrations of flammable gases, flammable liquid-produced vapors, or combustible liquid-produced vapors are not likely to exist under normal operating conditions” –UL definitions

# Modularity to meet industrial demands

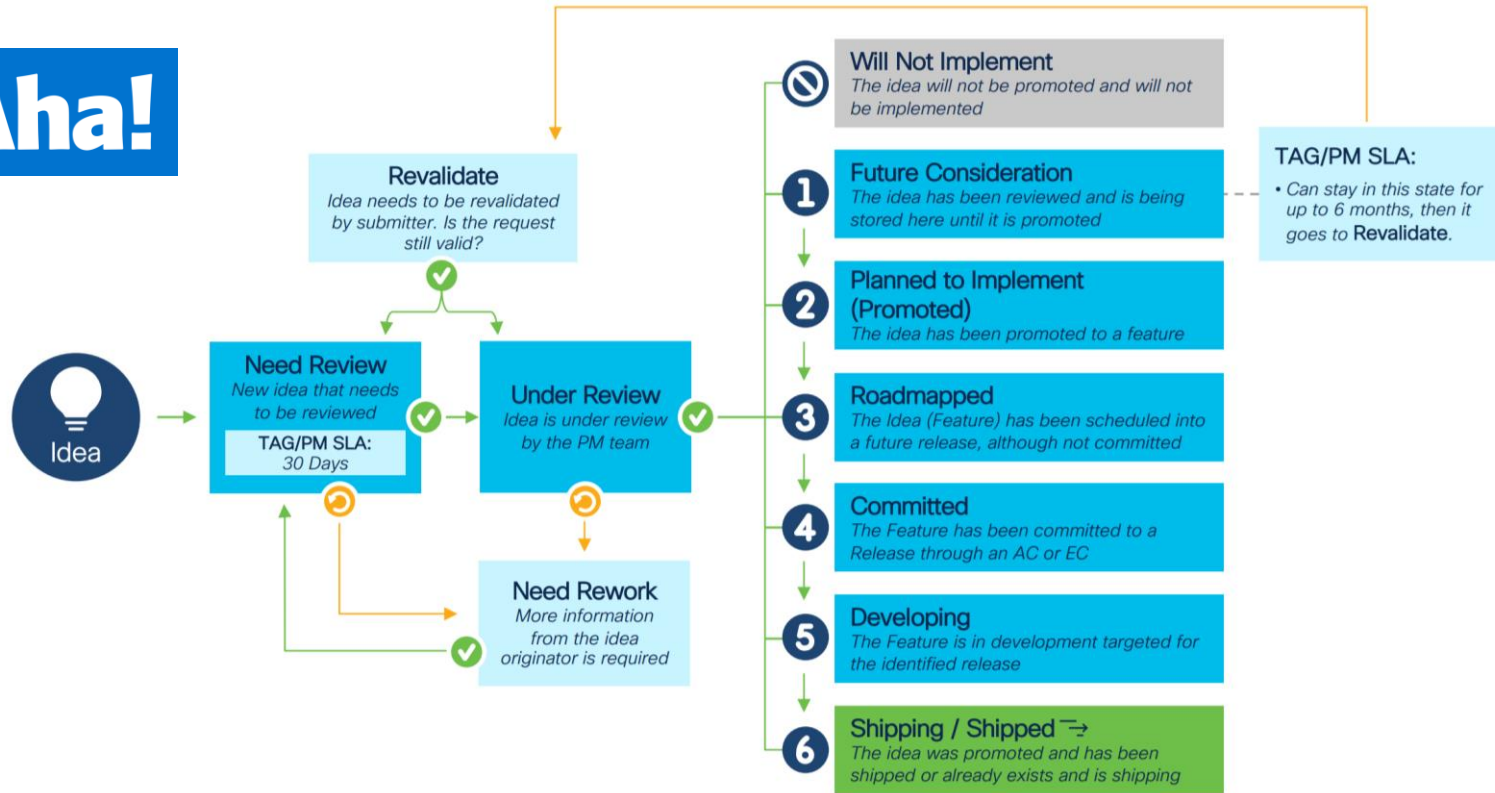
Designed for  
expansion  
from Day 0



**MODULE INTEGRATION VIEW**

# Share your ideas & needs

**Aha!**



# Honeywell & Emerson



# Emerson 1410S



# Honeywell OneWireless



# Support & highlights



## Wireless Standards

- ISA100 Wireless
- WirelessHART
- 802.11/a/g/n/ac Wave 2

## Supported Interfaces

- Modbus
- HART
- OPC
- GCI
- Enraf
- Experion PKS CDA



## Sensor Portfolio

- Pressure Differential
- Pressure
- Flange Mount Pressure
- Wireless Temperature
- Gas Monitor
- Wireless IO
- Corrosion Detection
- Flow Meters
- Fluid Levels
- Vibration Detection



The results

\$10K

in installation  
savings,  
*per instrument*

10%

gain in  
productivity  
measures

70%

decrease in  
hardware  
carbon footprint

# Wipelot EagleEye



# Ali Samioglu

## Leader of Systems Engineering, GVSE MEA

- 14 years at Cisco in multiple roles; including post-sales and pre-sales
- CCIE RS&DC #29893
- Leading the Eagle Eye project from the incubation to final product



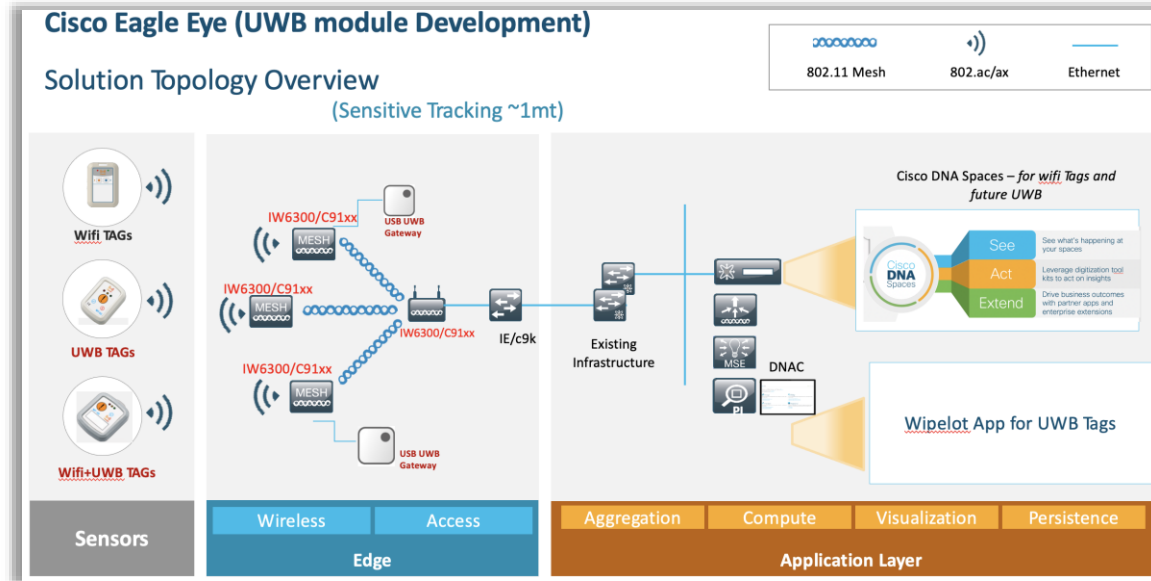
and introducing...

# Wipelot EagleEye

- Ultra Wideband location tracking
- Industrial applications include Mining, Manufacturing, and Oil & Gas
- Accuracy up to 20cm
- Enhanced personnel safety and asset accountability



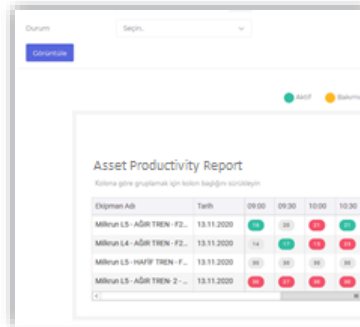
# End to end solution



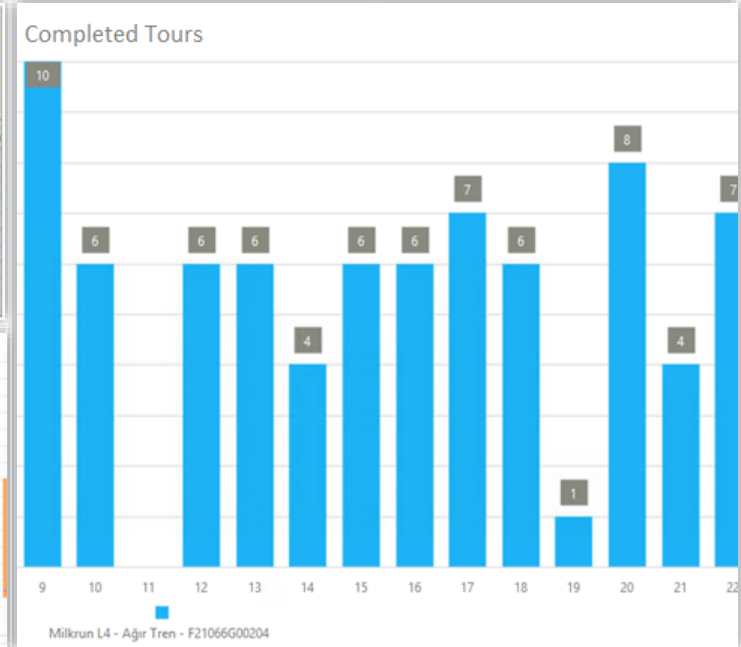
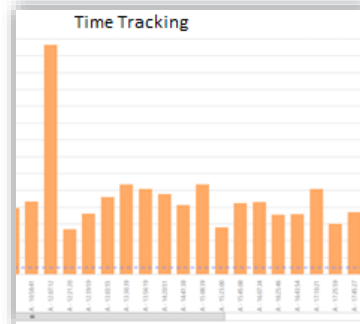
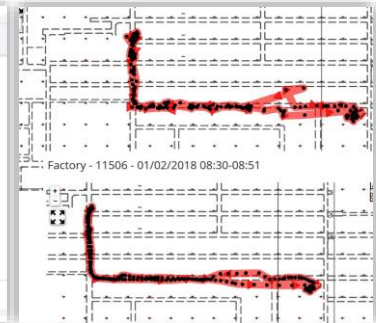
# Metrics & use cases

- Accurate location information provides detailed route analysis
- Detailed heatmap
- Distance measurement
- Region based idle work hour calculations

- Collision avoidance
- Lone worker safety
- Social distancing
- Environmental monitoring

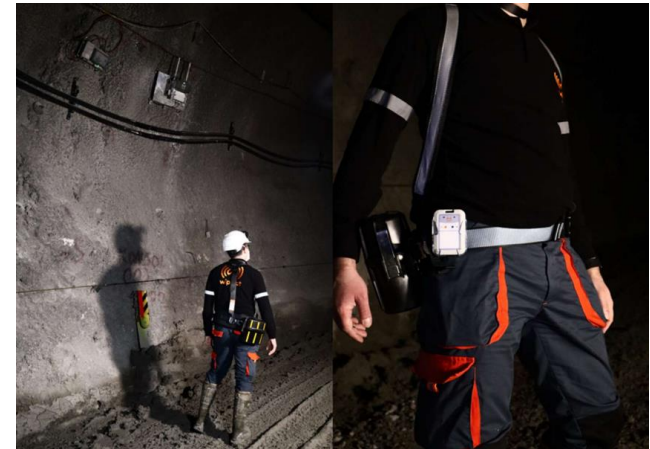
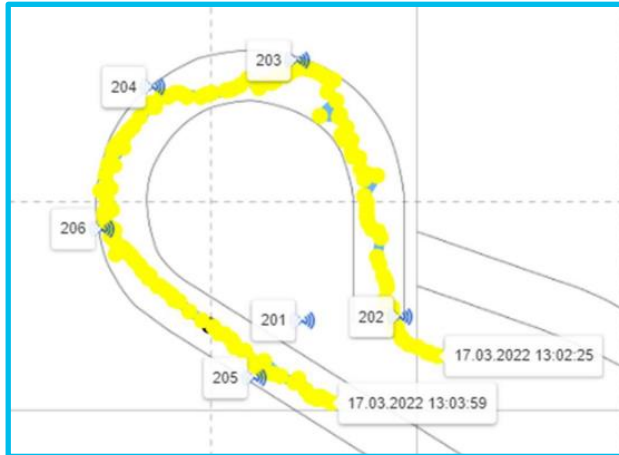
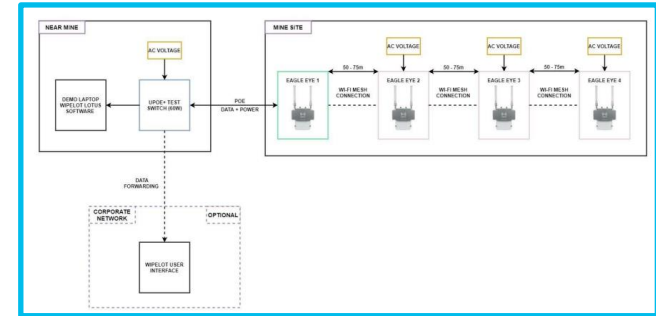


Field	Value
Cycle Quantity/hr	2/hr
Target Frequency	5 min btw cycles
Milkrun L4 - Ağır Tren - F21066...	A
Realized Total Cycle Quantity	85
Daily Non-Synchronised Cycle Q...	41
Daily Cycle Quantity	51.76 %
Target	0 %



# Mining case study

- Esan ceramic materials mine, Balikesir, Turkey
- Tests: Durability, Meshing, Personnel & Vehicle Tracking
- 120-day uninterrupted endurance & mesh connection
- 15 cm accuracy deviation from control tags
- Successful emergency alarm monitoring & response



# What's next

HAZLOC Certifications

Blogs / Product Launches /  
Partner Events

EagleEye website:  
<https://www.wipeloteagleeye.com>

Reach out to Ali Samioglu or  
Anthony Savaglio for any opp.







# Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.



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## Learn

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## Certify

### Cisco Certifications and Specialist Certifications

Award-winning certification  
program empowers students  
and IT Professionals to advance  
their technical careers

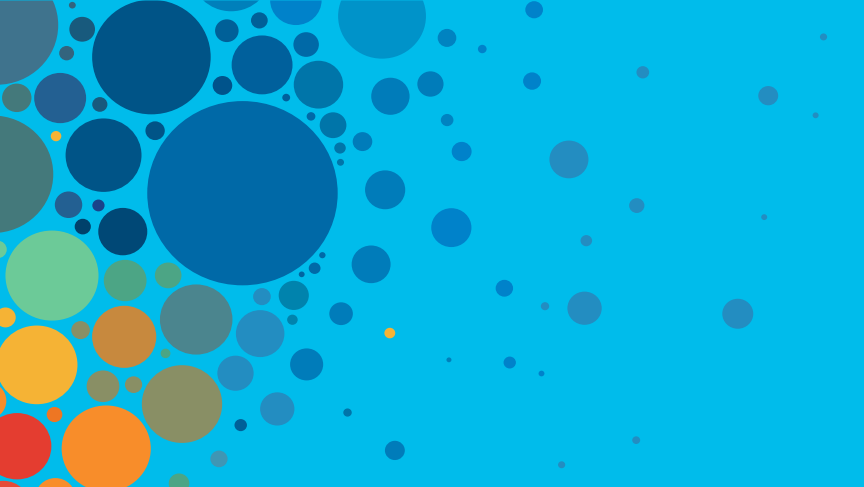
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# Continue your education

- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at [www.CiscoLive.com/on-demand](https://www.CiscoLive.com/on-demand)



The bridge to possible

# Thank you

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