

RESILIENCE, ROBUSTNESS AND RELIABILITY

AN RFID READER LIKE NO OTHER!



WHO'S ON THE CALL TODAY?



Jo Major



Neil Mitchell



WHY ARE WE TALKING?

✦ Today's' RFID readers

- Designed in a lab
- Little consideration about the installed environment
- Installation life-time?
- Physical abuse?
- Dust? Condensation? Rain?

EXCELLENCE

- ✦ In today's environment.....
 - 50C in Canada and -15C in Texas
 - Power grid instability
- ✦ IP67
 - Outdoor operation
- ✦ Thermal
 - Color reflects light
 - No NEMA boxes
 - No fans
- ✦ HERO Certified
- ✦ RFID Excellence
 - Tag detection and speed
 - 33 dBm
- ✦ Software
 - RFID Console, API, SDK

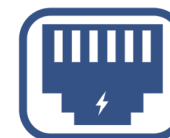
SENSORS



COMMS



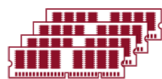
POWER



RESIANCE



SensX EXTREME



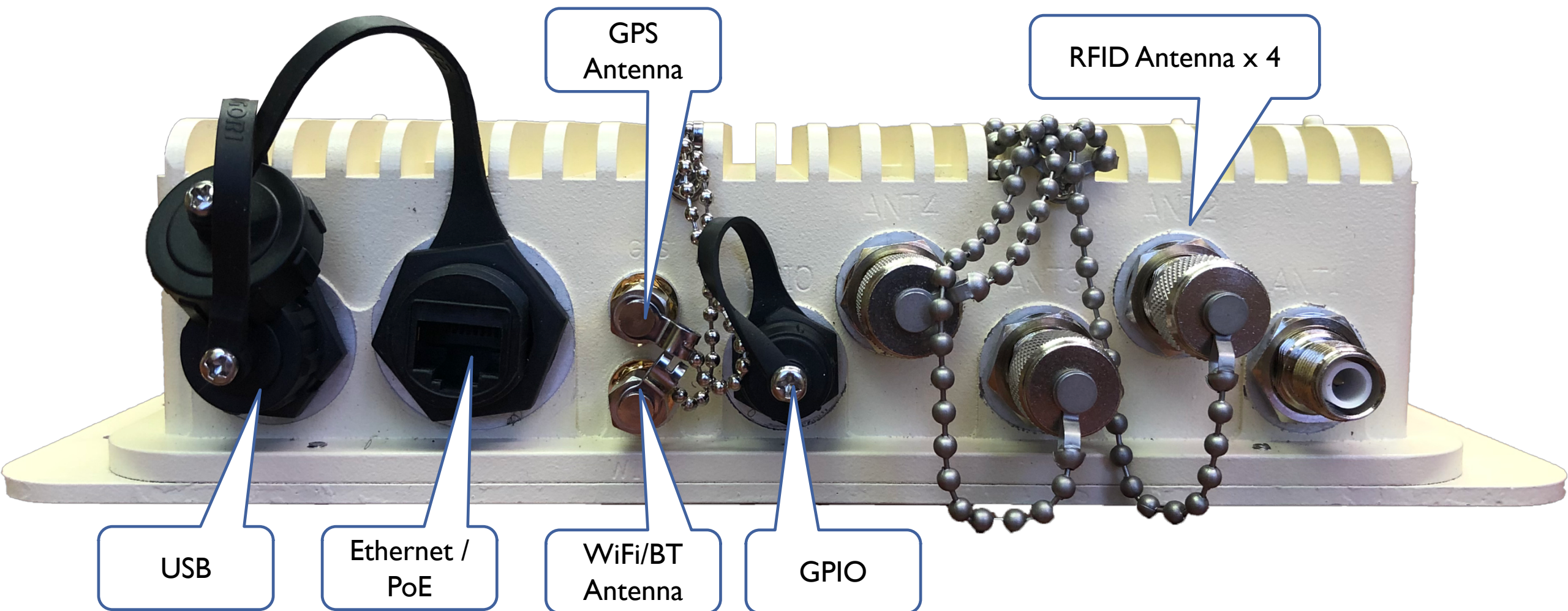
**HERO Certified
MIL-STD 464**

What is cargo? RFID

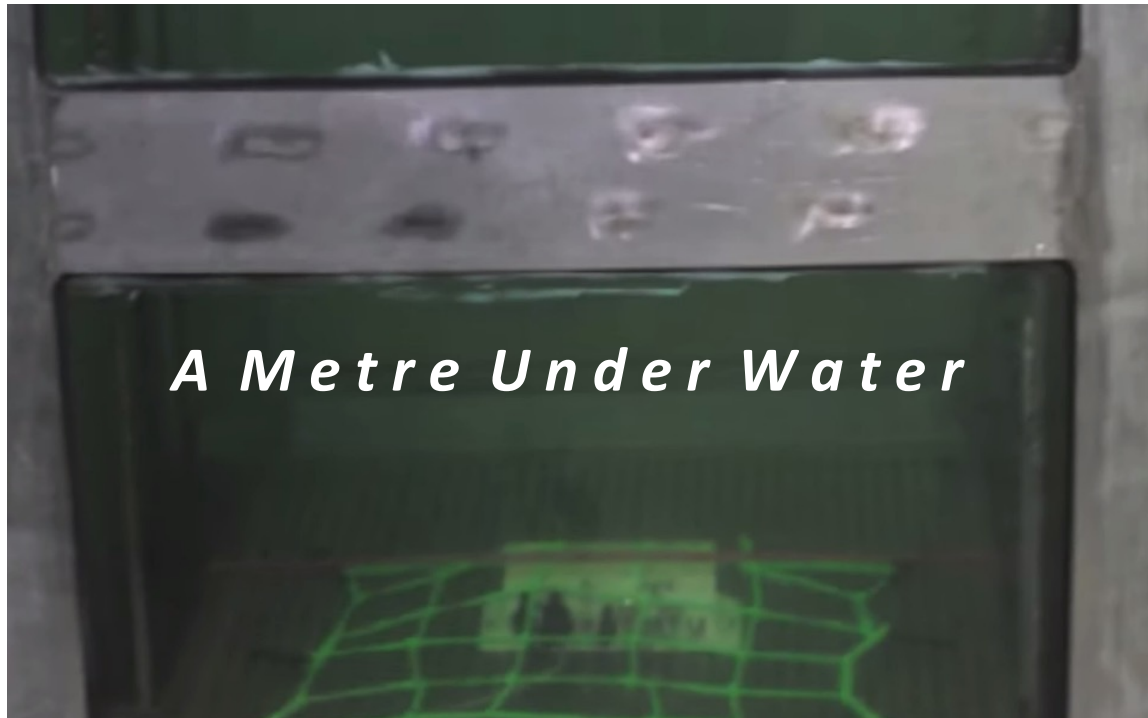
Where is cargo? GPS

BUSINESS
INTELLIGENCE

CONNECTORS



IT'S ROBUST – IP67 ...WATER ... COLD ... HEAT



IT'S ROBUST – IP67 ...PHYSICALLY

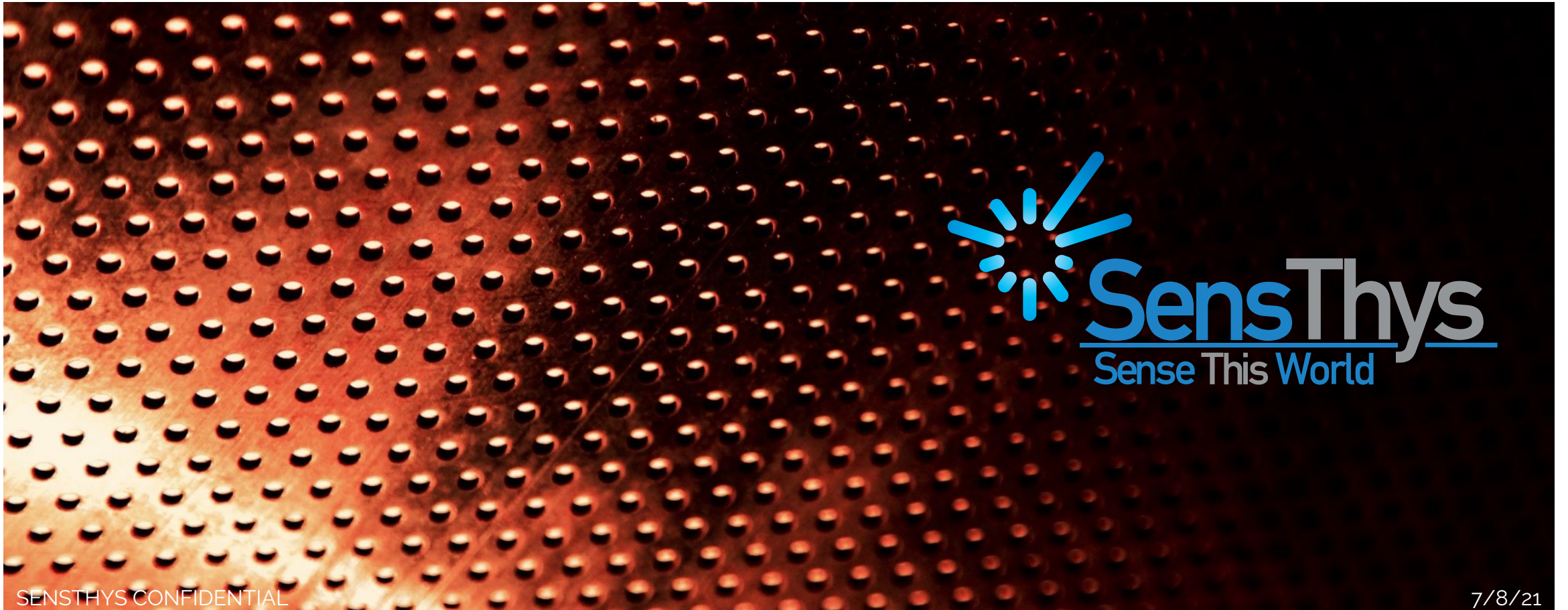


SOFTWARE AND TOOLS



- ✦ Console
- ✦ AutoSens
- ✦ Command Center
- ✦ Web Browser (Extreme)
- ✦ Developer-Friendly SDKs
 - **RESTful API**
 - C# (.NET)
 - Java
 - Visual Basic (.Net)
 - LLRP
- ✦ Native Support
 - WiFi, BT
 - GPS (Lat, Long, Ele, Motion)

EXTREME APPLICATIONS



SENSTHYS CONFIDENTIAL

7/8/21

US MILITARY



- ✦ F35 Lightning 2

- ✦ HERO

 - **Certified** for use around ordinance

- ✦ Monitors aircraft inventory

- ✦ Key features used:

 - IP67 and robust
 - Thermal
 - GPS & WiFi
 - Vehicle mount
 - Battery operation



US LAW ENFORCEMENT



- ✦ Key features used:
 - Rugged
 - Thermal range
 - GPS
 - BT gateway to officer
 - On-reader storage
 - Battery operation



FORTUNE 100 SMART BUILDING MATERIALS



✦ Smart Building Materials

- Embedded sensors
- Moisture detection

✦ Key features used:

- Rugged
- Thermal
- GPS
- Storage
- Battery operation



US STATE DEPT. OF TRANSPORTATION



- ✦ Embedding tags in roads
 - Monitors surface quality
- ✦ Inspector truck
 - Antenna mounts to back of trucks
- ✦ Key features used:
 - Rugged chassis/connectors
 - Outside use
 - Battery operation
- ✦ Performance
 - Tags read at *>60mph*
 - Detailed GPS location
 - 100ms position reporting
 - Every tag time, EPC and location stamped



AUTOMOTIVE DEALERSHIPS



❖ Vehicle tracking

- Readers mounted above vehicle service aisles
- Alerts service staff on car arrival
- Pulls-up customer/vehicle records
 - Alerts staff
 - Welcomes customer

❖ Key features used:

- Rugged chassis/connectors
- Inside/Outside use
- LLRP



DO YOU NEED A READER THAT NEEDS ANY ONE OF...



✦ IP67

- Outside wet or dry
- 100% humidity
- Condensing environments

✦ Unmatched thermal

- Cold start to $<-80^{\circ}\text{C}$
- Operating to beyond 55°C

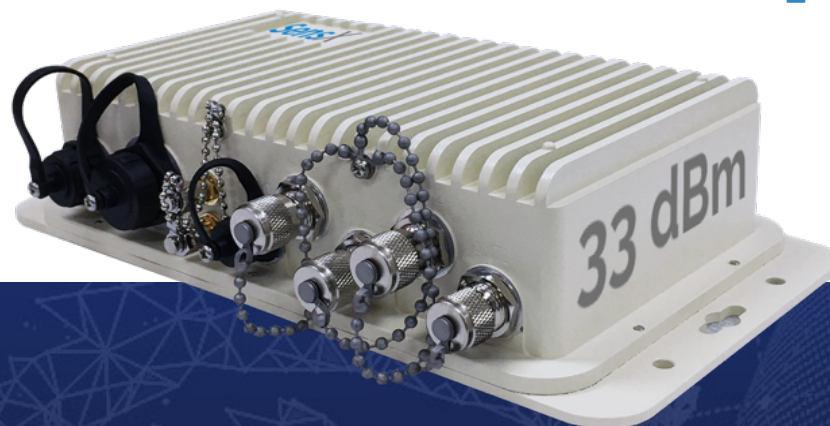
✦ GPS

- Real time location
- Tag location stamping

✦ Ethernet/WiFi/BT

✦ Vehicle-ready

- Battery
- Robust



PORTFOLIO



Fixed Readers

SensX



HERO CERTIFIED

Extreme

Tough Performance

33dBm
4 ext antennas
GPIO
IP67

M-POWER

SensArray



Enterprise

Elegant simplicity

33dBm
3 PoE Out
Integrated + 3 ext antennas
Powered GPIO

Protection

EPIC

Always Right!

Antenna



SensRF-101

Tough Performance

IP68
9dBic
10" x 10" x 8/10"
Polycarb radome
Inside/Outside

Handheld



CSL 108

Tough Performance

IP54
Android or iOS
BT LE



IF IN DOUBT...

...REACH OUT!

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