

•

0

The Keris Electronic Support Measure (ESM) system provides small form factor radio frequency (RF) signal detection, collection, and parametrization from 100MHz to 18GHz. This is designed for installation on small crewed, uncrewed, high altitude, and unattended platforms. The solution reduces the size, weight and power (SWaP) needed to detect, identify, and collect modern radar and communications signals.

-

# Keris ESM



## **MODE OF OPERATIONS**

#### Scanning

• Supports a variety of scanning modes to support JICD, automated search, fast scanning, and staring

#### **Duty Cycling**

- System holds a state configuration file to allow for scans to be executed immediately at boot, across power cycle, etc.
- Internally managed power rails for remote battery powered operations and low power modes

#### **Time and Position**

• Time and position from external or internal GPS

#### Alternate Configuration

• Contact us for optional configuration including optional transmit features

## BENEFITS



**Extremely Small SWaP** 1U Modular Payload Form Factor



**Proven Algorithms** Processing based on SNC AE-4500 ESM

Ease of Integration JICD and ModPayload compliant

Auto Capability Headless operations for unmanned systems

Automatic ESM Solution Detect parametrize and collect modern RF signals

### **KERIS ESM FEATURES**

- Attritable and Low Cost
- Size, Weight & Power:

1.5"x4.29"x6.25"

1.6 lbs

<35W at 28VDC

- 1 Gbps Ethernet Interface and GNSS Input
- Frequency Range: 0.1 18 GHz with 500MHz IBW
- TOA accuracy: 20ns nominal; 1-chan TDOA
- Minimum Detectable Signal: -75dBm
- Low Noise Figure, antenna ready
- 1 TB of internal storage for collection
- Real-time encryption, secure & authenticated boot
- Internal real time pulse parameterization Up to 500,000 pulses per second



#### KERIS ESM BLOCK DIAGRAM



444 Salomon Circle | Sparks, NV 89434 775.331.0222 | ≤ mst@sncorp.com | ⊕ sncorp.com SNC

DATA CONTAINED WITHIN THIS DOCUMENT ARE SUBJECT TO CHANGE AT ANY TIME AT SNC'S DISCRETION. | SNC is a trademark of Sierra Nevada Company.