CNG-2000 Series

Wireless Network Surveillance

Automated Real-Time Surveillance on 5G NR, 4G LTE, WiFi 6/6E

- ✓ Simultaneous Passive Collection over Multiple Bands
- ✓ Supports 5G NR FR1 "Sub-6" and FR2* "mmWave" Bands
- ✓ Fully Automated Collection with Sensor Self-Configuration
- ✓ Headless Operation via Sensor Touchscreen Display
- ✓ Detects, Decodes, and Logs Protocol Information in Real-Time
- ✓ Geolocates Cellular Infrastructure in Real-Time from Air and Ground Platforms
- ✓ Supports Field Upgrades for Software and Firmware
- ✓ Fully Featured Remote Network Interface
- ✓ Open Architecture Compatible with Built-in VITA49 Data Source and Sink

* Option

Equipment Panels

Front Panel	Back Panel

Cobalt's Advanced 5G Capabilities

5G NR DSS and NSA Cell Identification • Classify hybrid 4G/5G networks	5G NR Cell Vulnerability + Trust Score • Detect atypical and anomalous activity
Accelerated Capture for Rapid Surveys • More 5G bands surveyed in less time	Interface COTS or Precision Antennas • Supports flexible platform configurations
High Sensitivity Cell Inspection • Operate in challenging long standoff or high interference 5G environments	Real-Time Active Connect for 5G NSA • Gather deeper network configuration information
5G Beam Profiling • Identify cell serving beam direction with higher precision	5G NR Attack Detection • Identify advanced and burgeoning threats (e.g., 5G beam denial, DDoS)

System Specifications

	Specifications

System	Signal List:
	   ▪ 5G NR
	   ▪ 4G LTE
	   ▪ Wi-Fi 6/6E
	Future Support:
	   • 2G: GSM
	   • 3G: HSPA, HSDPA, WCDMA, CDMA2000 (EVDO), 3G+: WiMax
	Boot to Operational:
	   • Detect/Decode: < 1min
	   • Geolocation: <20 min

RF	Frequency Range:
	   ▪ 1MHz-8GHz
	   ▪ 24-40GHz (with option)
	RF Channels:
	   ▪ 4 receiver and 4 transceiver channels
	Reference Inputs:
	   ▪ Analog GPS Input
	   ▪ 10MHz and 1PPS Input

Mechanical, Electrical, Power	Input Power:
	   ▪ 18-48V DC (120/240VAC to 28V DC converter supported)
	Power Consumption:
	   ▪ ~200W (typical operating conditions)
	Mechanical:
	   ▪ Weight: 20 lbs (approx.)
	   ▪ Dimensions: 2U Standard Rack Mount (17" W x 19" D x 3.5" H)
	Environmental:
	   ▪ RTCA DO-160G, MIL-STD 810 support if required

Data Output, Interfaces	Data Outputs
	   ▪ VITA49, JSON
	   ▪ Compatible with ROVER interfaces (v4.22.1)
	   ▪ Open API supported; special formats available upon request
	Interfaces
	   ▪ 1GbE/2.5GbE (RJ-45)
	   ▪ USB 3.2 (Gen 1)
	   ▪ 10GbE/25GbE/40GbE/100GbE (QSFP28)