

# RIO™ NIÑO COMINT SYSTEM

Rio Niño provides comprehensive COMINT beyond 200 nautical miles for situational awareness and threat warning.

SPECIFICATIONS	
Weight:	15 lb. (6.8 kg)
Size:	9 H x 5.7 W x 8.5 D (in)      22.6 H x 14.5 W x 21.6 D (cm)
Power:	28 VDC, 180W
Frequency Coverage:	0.1 MHz to 6 GHz
Instantaneous Bandwidth:	320 MHz (80 MHz per receiver)
Receiver Channel Quantity:	4
Dynamic Range:	75.3 dB at 500 MHz
Noise Figure:	10.6 dB at 500 MHz
Sensitivity (at RF):	-115.5 dBm 3dB SNR at 500 MHz with 30 KHz DDC BW
Minimum SNR:	12 dB, Modulation dependent, detection threshold typically set 12 dB above noise floor estimate
Modulation Types:	AM, FM, SSB, FSK, BPSK, QPSK, OQPSK/SQPSK, QAM and MSK
Architecture:	3U VPX PCIe
Geolocation Techniques Supported:	Commutated Direction Finding/Advanced Geo Engine & Precision Geo (JICD 4.2)
Datalink Bandwidth:	Uplink as low as 10kbps/downlink as low as 100kbps BLOS/LOS, ground-air internet protocol
Data Products:	Lines of Bearing/ Geolocations/ Audio/Digitized Signal Output/Metadata/ Cursor on Target

Rio Niño System

## OVERVIEW

Rio Niño is the latest generation of technology, leveraging decades of investment in advanced COMINT software-defined radio (SDR) systems. Operationally fielded in 2016, the 15-pound Rio Niño contains all COMINT functionality with three million source lines of software leveraged from L3Harris' largest SIGINT systems. It is an

Example of L3Harris DF/Collect Antenna Array (20 MHz to 6 GHz shown)

## FEATURES

- > Designed for size, weight and power (SWAP)—restricted manned and unmanned platforms
- > COMINT search, detect, classify, DF/geolocate, copy, special signals and dissemination
- > Member of L3Harris scalable COMINT family—common software and future upgrades