N100-3 SERIES GPS ANTENNA

The N100-3 GPS antenna has been designed to provide a reduced-size aperture for anti-jam GPS reception over the full military GPS M-code bandwidth. The N100-3 footprint is a mere 7 inches by 7 inches. The antenna assembly is a four-element antenna aperture which is designed to receive right-hand circularly polarized radiated signals from NAVSTAR GPS satellites and couple the radio frequency signal to the antenna electronics (not supplied by L3Harris) via four coaxial cables. When used in conjunction with antenna electronics equipment such as GPS Anti-Jam System-1 or Advanced Digital Antenna Production null-steering electronics, the four-element array is used to adaptively steer nulls in the presence of interfering jamming signals. The antenna assembly contains the antenna elements, radome, housing and TNC female bulkhead connectors.

Microstrip patch type radiators provide a low-pro le package. A hybrid feed incorporated in each element allows operation over a wide temperature band without the tempera - ture-induced detuning often associated with microstrip patch elements.

A one-piece composite radome and an aluminum baseplate provide the best combination to endure severe vibration, acoustic noise and rain-erosion requirements. This technology can be used for platforms such as the AV-8B.

Frequency range	L1 1575.42 ± 12.0 MHz L2 1227.2 ± 12.0 MHz
VSWR	1.5:1
Gain	-3.5 dBic over 160° cone
Polarization	RHCP
Null depth	>20 dB
Radiation pattern	Hemispherical
Power handling	Receive only
Weight	3.0 lbs max
Finish	White, grey
Military	MIL-E-5400 MIL-STD-202

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Approved for Public Release 10-2010 | EAID EXPID9473

Nonexport-controlled Information

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