

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

DATASHEET MILANT



Figure 1. Prototype

Active Compact GNSS Antenna for Military and Public Safety Applications

The antenna provides low-noise coverage of the entire GNSS frequency range in L band and efficient suppression of out-of-band interferences. The electrical and mechanical interfaces are compatible with those of most currently used narrowband L1/L2 GPS antennas and can be adjusted in accordance with customer's requirements.

Fraunhofer Institute for Integrated Circuits IIS Am Wolfsmantel 33 91058 Erlangen, Germany

Contact Dr. Alexander Popugaev Chief Scientist alexander.popugaev@iis.fraunhofer.de

www.iis.fraunhofer.de

Technical Data

Parameter	Value	Table 1.
Passband	1160–1300 MHz and 1525–1610 MHz	Specifications
Polarization	RHCP	
Passive zenith gain	L1 & E1 (PRS, 1.55–1.60 GHz): >4 dBic	
	L2: >2 dBic	
	E6 (PRS, 1.25–1.30 GHz): >2 dBic	
Passive horizon gain	>-10 dBic	
Axial ratio	<3 dB @ zenith	
LNA gain	30 dB	
Impedance	50 Ohms	
VSWR output connector	<2:1	
Supply voltage	+3.3 to +40 VDC @ <50 mA	
Lightning protection	DC grounded	
Connector	TNC female	
Diameter	89 mm	
Height (w/o TNC)	25 mm	



Figure 2. Simulated Radiation Pattern: GND Ø 200 mm