

AR25 – Smart Antennas



Description

With emerging satellite systems closely on the horizon, in the form of the European Galileo System and the Chinese Compass (Beidou) System, a new high performance antenna is needed to encompass all Global Navigation Satellite Systems.

The new AR25 has been designed for all existing and currently planned signals of the GPS, GLONASS, Galileo and Compass systems.

New Standard

Choke ring antennas are known for their superior multipath rejection compared to other types of geodetic antennas. The AR25 maintains superior levels of multipath rejection and tracking expected from a choke ring antenna, whilst setting new standards in low elevation tracking compared to traditional 2D choke ring design. Enhances in atmospheric studies and network RTK modelling demand high performance antennas that can track satellites as soon as they are visible, down to the horizon and even below. Designed for a variety of applications, including reference stations, monitoring, seismic studies, scientific and atmospheric studies, the AR25 is a robust high performance antenna, built to last.

Features

- **Revolutionary Design :** The AR25 brings choke ring design to a new level to enhance the key benefits of the choke ring antenna. Moving away from the traditional 2D choke ring design, the innovative 3D choke ring sets a new standard, whilst building on the strong traditions of the previous design. The AR25 uses a new ultra-wideband Dorne-Margolin element. The Dorne-Margolin antenna element design has become the industry standard for high accuracy and performance.

Specifications



Technical Specification	
Lelca AR25	
Design	Dorne-Margolin antenna element with 3D choke ring ground plane
Signals tracked	GPS: L1, L2, L2c, L5 GLONASS: L1, L2, L3 Galileo: E2-L1-E1, E5a, E5b, E6, AltBOC Compass: B1, B2, B3, L5 L-Band (incl. SBAS, OmniSTAR and CDGPS)
Dimensions	380 mm x 200 mm
Weight	7.6 kg
Connector	N-Type with TNC adapter supplied
Supply Voltage	3.3 – 12 VDC
Nominal Impedance	50 ohms
Gain	typically 40 dBi
Noise Figure	0.5 – 1.2 dBi
Temperature, operating	– 55° C to +85° C
Temperature, storage	– 55° C to +90° C
Environmental Protection	Humidity: up to 100% Rain, dust, sand, wind: IP67 – Protection against blowing rain and dust. Waterproof to temporary submersion into water (1m)
Accessories	Weatherproof radome available
Antenna Cables	Are available in lengths of 1.2/2.8/10/30/50/70 metres. Longer cables available on request