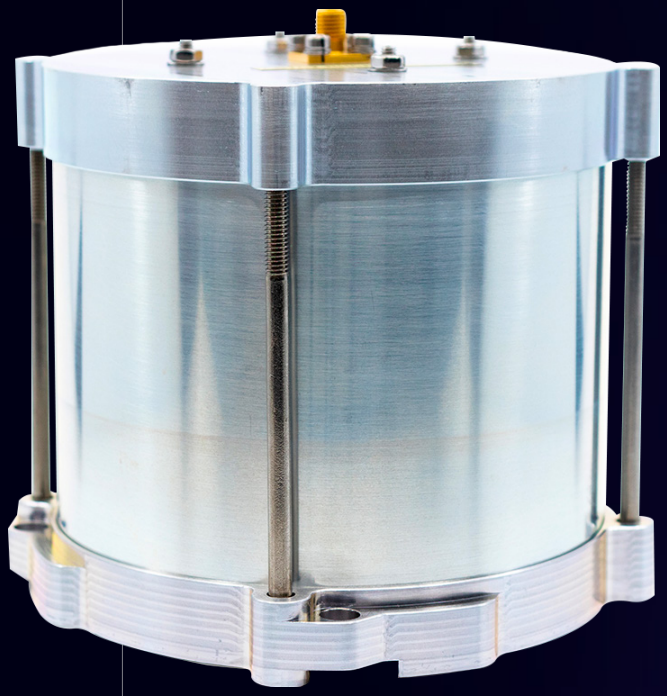
ANYWAVES

SPACE ANTENNA MAKERS

QUALITY SYSTEM CERTIFICATION DNV ISO 9001 AS/EN/JISQ 9100



NAVIGATION ANTENNAS

Test Cap for GNSS All-Bands Antennas

ANYWAVES Test Cap for GNSS All-Bands Antennas is essential to carry out end to end testing (parallelism, assembly chain, thermal vacuum...). It features a simple and robust design consisting in a cylindrical aluminum cavity, covered with absorber material and terminated by a RF probe.

It operates over the frequency bands of the GNSS All-Bands antenna. It is delivered in a single part that can be directly screwed on top of the antenna, minimizing both the risk to damage the antenna and the manipulation steps.

NB: a Test Cap compatible version of the ANYWAVES GNSS All-Bands antenna is required.

RF Chain Measurement | TVAC Compatibility | Plug & Play | On-platform Test

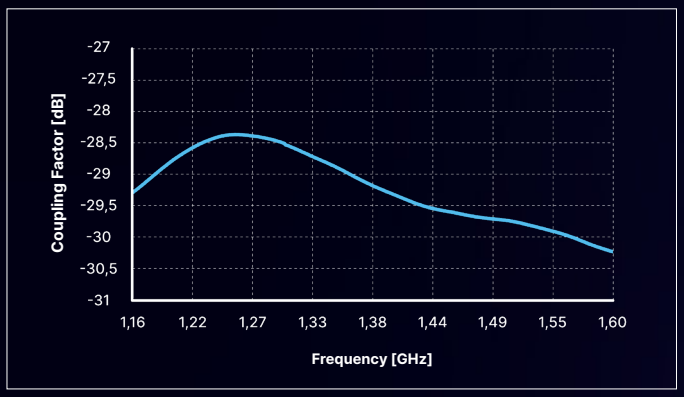
Benefits

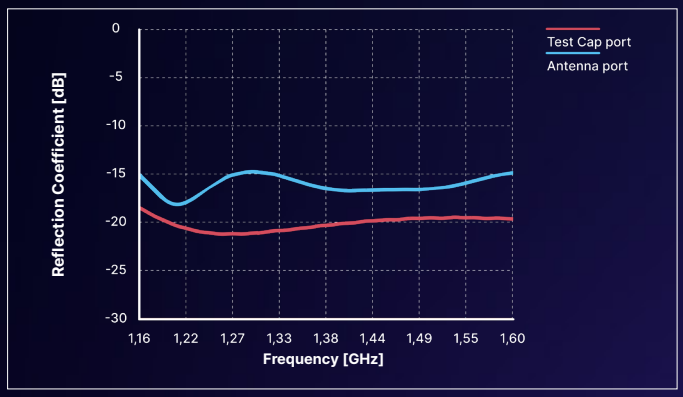
- Enables reproducible measurements of antenna & transceiver on the platform
- Very low impact on the antenna matching (reflection coefficient)
- No mounting bracket required on the platform (screwed on the antenna itself)
- ITAR Free
- Compatible with thermal vacuum environment with low outgassing properties
- Safe & easy to mount & dismount thanks to an oriented slot ensuring the correct positioning
- Low RF leakage to protect users from radiation during the test

TEST CAP FOR GNSS ALL-BANDS ANTENNAS

Typical Measured Performance

RF Chain Measurement | TVAC Compatibility | Plug & Play | On-platform Test





Typical Performance

Frequency Bands	**From 1 160 MHz to 1 610 MHz**
Bandwidth	> 450 MHz
Polarization	Right Hand Circular Polarization
Reflection Coefficient at Antenna Port	< -10 dB
Reflection Coefficient at Test Cap Port	< -17 dB
Coupling Factor	~ -29 dB
Coupling Factor Variation	< 1 dB everywhere within the frequency bands: - GPS: L2/L5 - Galileo: E5a/E5b/E6 - Glonass: G2/G3 - Beidou: B2/B3 < 0.5 dB everywhere within the frequency bands: - GPS: L1 - Galileo: E1 - Glonass: G1 - Beidou: B1

Physical Characteristics

Envelope Size Without Connector	Ø 118.8 mm x 96.3 mm
Mass With Connector	915 ± 5 g
Connector	Coaxial SMA female (50 Ω)
Mechanical Interface	4 x M3 mm (unthreaded hole)
Qualification Temperature	-40°C / +70°C

Disclaimer: facts and figures herein are for information only and do not represent any warranty of any kind.