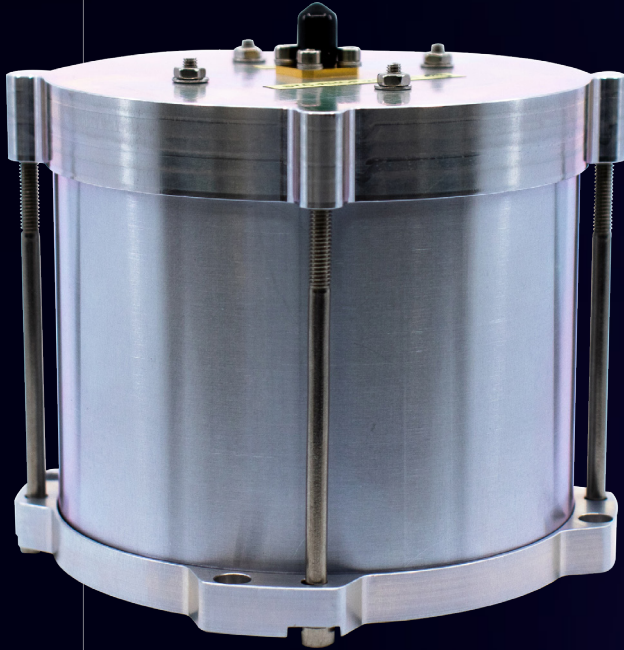




TT&C ANTENNAS

Test Cap for S-Band TT&C Antennas

ANYWAVES Test Cap for S-Band TT&C 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 band of the S-Band TTC 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 S-Band TT&C 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

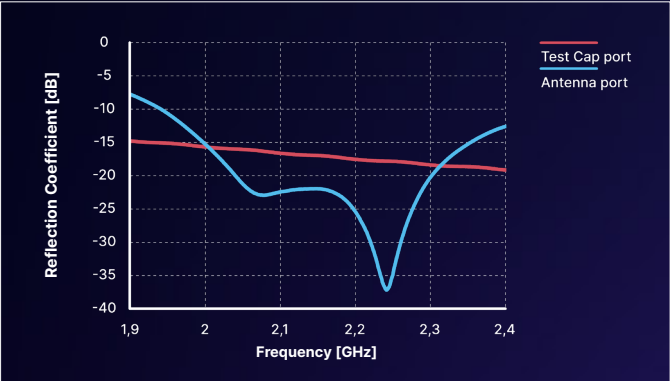
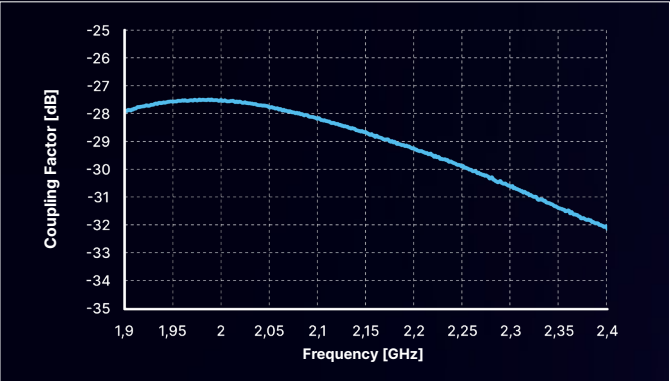
Typical Measured Performance

RF Chain Measurement

TVAC Compatibility

Plug & Play

On-platform Test



Typical Performance

Frequency Bands	From 1.98 GHz to 2.29 GHz
Bandwidth	> 310 MHz
Polarization	Left or Right Hand Circular Polarization
Reflection Coefficient at Antenna Port	< -15 dB
Reflection Coefficient at Test Cap Port	< -15 dB
Coupling Factor	~ -29 dB
Coupling Factor Variation	< 1 dB within telecommand band < 2dB within telemetry band

Physical Characteristics

Envelope Size Without Connector	Ø 117 mm x 98 mm
Mass With Connector	910 ± 10 g
Connector	Coaxial SMA female (50 Ω)
Mechanical Interface	4 x M3 (unthreaded hole)
Qualification Temperature	-40°C / +70°C