

**ANYWAVES**

CONTROL MATERIAL TO MASTER WAVES

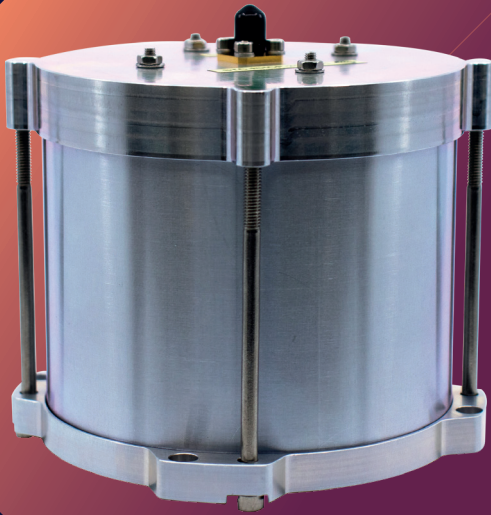
# Test Cap for S-Band TT&C Antennas

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)
- 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
- ITAR Free

ANYWAVES, a French space equipment manufacturer based in Toulouse, provides high-performance and high-quality antennas for satellite constellations.

ANYWAVES Test Cap for S-Band TT&C Antennas features a robust design consisting in a cylindrical aluminium 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 as 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.

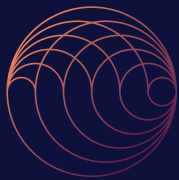
**NB: a Test Cap compatible version of the ANYWAVES S-Band TT&C Antennas is required.**

**ANYWAVES**

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Waiver : Fact and figures herein are for information only and do not represent any warranty of any kind





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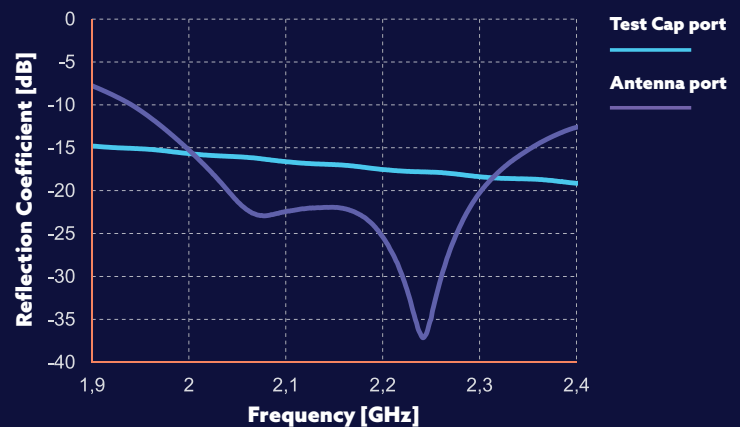
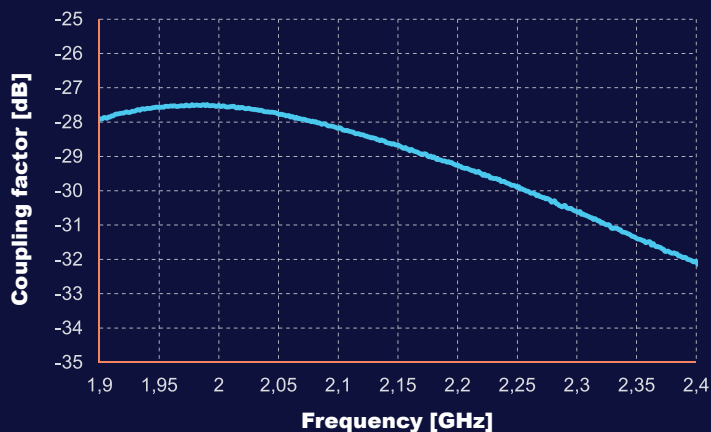
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## Typical Measured Performance



## Typical performance

Frequency band	From 2 025 MHz to 2 290 MHz
Bandwidth	> 265 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
	< 2 dB within telemetry band

## Physical characteristics

Envelope size without connector	Ø 117 mm x 98 mm
Mass with connector	910 ± 10 g
RF Power	More than 3W
Operational Temperature	-40°C / + 70°C
Connector	Coaxial SMA female (50 Ω)
Mechanical interface	4 x M3 (unthreaded hole)