



# S-band Antenna

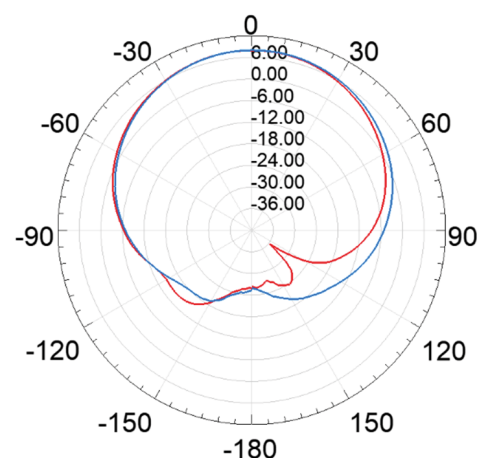
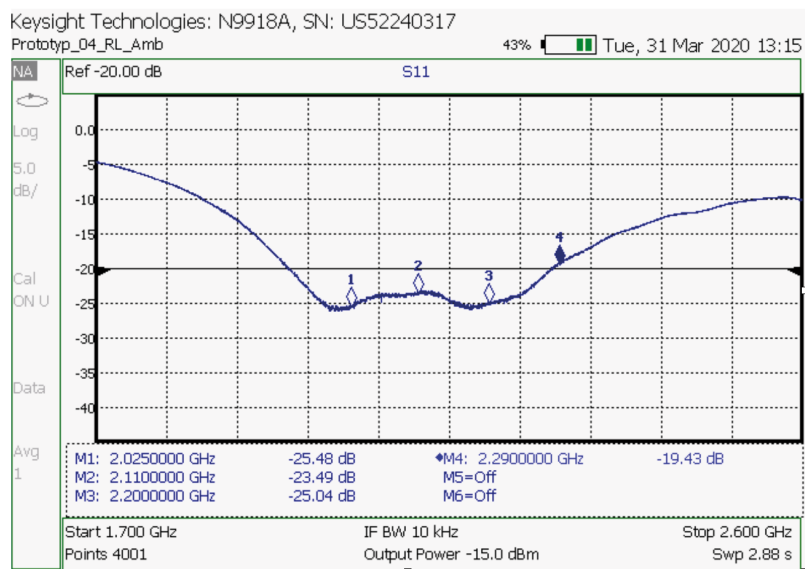
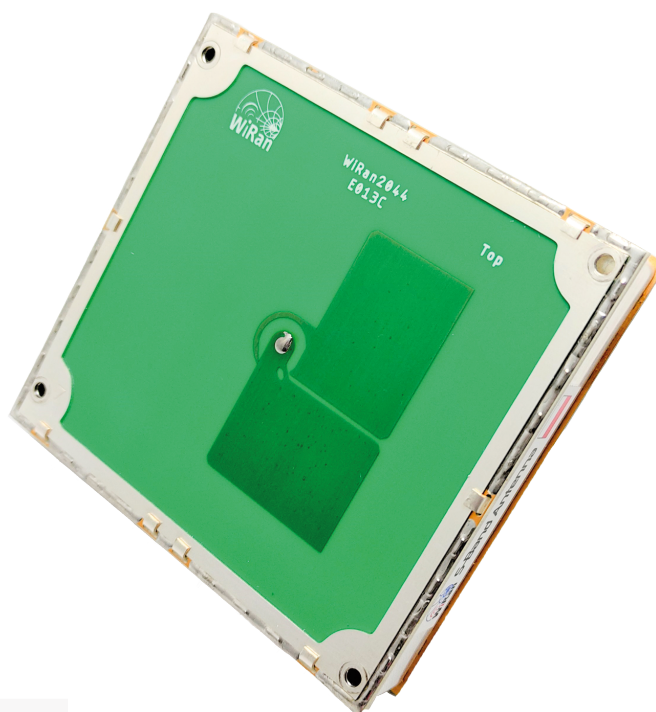
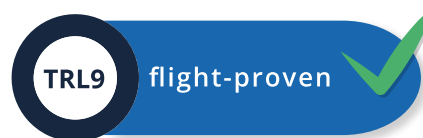
for nanosatellites applications

## ABOUT

WiRan S-band antenna provides full-duplex communication for data transmission and TM&TC. The antenna is designed to operate in 2025-2290 MHz band. Good polarization quality over broad beam width in both RX and TX is provided by one single antenna.

## FEATURES

- compliant with the CubeSat nanosatellite standard
- RHCP by default (LHCP available)
- covers entire S band - no need to wait for frequency allocation
- designed for omnidirectional coverage of nano/microsatellite (2 antennas + splitter)
- full duplex ready



Radiation pattern, S-Parameters available on request.

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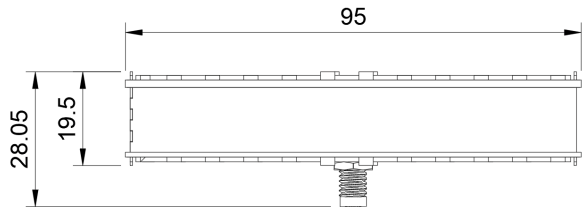
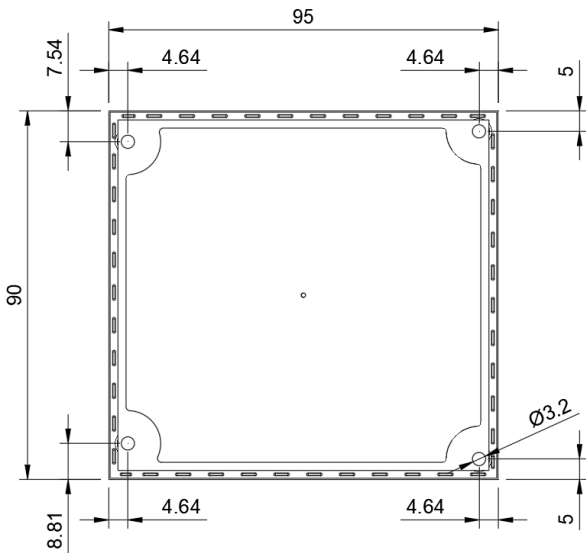
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| RF Parameters       | Guaranteed Value | Typical Value | Unit |
|---------------------|------------------|---------------|------|
| Frequency Range     | 2025-2290        |               | MHz  |
| Return Loss         | >15*             | >17           | dB   |
| HPBW                | >70              | >81           | °    |
| Gain                | 7.5±1            | 7.5           | dBi  |
| AR (RHCP) @ 0°      | <6               | <4.5          | dB   |
| AR (RHCP) max @±40° | <8               | <6.7          | dB   |
| RF power            | 10               | 10            | W    |

| Environmental Parameters          | Value                | Tolerances | Unit |
|-----------------------------------|----------------------|------------|------|
| Operating temperature range       | -75/+90              | -          | °C   |
| Weight                            | 87                   | ± 5        | g    |
| Maximum linear dimension (X or Y) | 95                   | ± 0.5      | mm   |
| Maximum height (Z)                | 26.2                 | ± 0.5      | mm   |
| Height without connector (Z)      | 17.7                 | ± 0.5      | mm   |
| RF interface                      | SMA female connector | -          | -    |

\* Antenna has been tested in -75°C to +160°C



All values in mm.  
STEP files available on request.

| Ordering code | Description                                     |
|---------------|-------------------------------------------------|
| ASA           | S-band antenna 2025-2290MHz, CubeSat compatible |