

RaySat SR300

Compact, Lightweight,
Ruggedized SOTM Antenna

SOTM: For Quick, Continuous Communications

To establish continuous, reliable and quickly deployed broadband communications, Satcom On-the-Move (SOTM) is often the only choice.

The RaySat SR300 antenna is compact, lightweight and ruggedized. It features a reliable, two-way antenna system that enables real-time broadband satellite communications across Ka and Ku frequencies, primarily for voice, video and data.

Low-Profile and Easy to Install

The RaySat SR300 antenna features an advanced flat panel array which covers both the Rx and Tx bands. Minimal size, weight and power consumption (SWaP) permits installation on small vehicles or marine vessels. The antenna's light weight ensures easy and safe mounting for quick and easy operation by non-technical personnel.

The antenna features multiple onboard tracking sensors, enabling accurate tracking, short initial acquisition and instantaneous reacquisition.

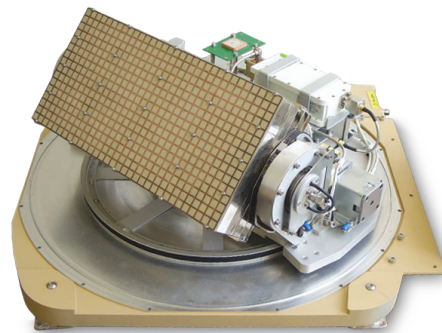
Modem Options

For maximum flexibility, the SR300 can be deployed in 3 ways:

- Integrated modem, including seamless mechanical integration of Gilat's GLT1000 modem. This allows for operation in low SNR conditions.
- Gilat modem, as part of Gilat's SkyEdge II-c mobility modem, taking advantage of its management and mobility support.
- 3rd party modem, if it is OpenAMIP v1.17 certified. When integrated with 3rd party modems, the antenna is supplied with an Antenna Control Unit (ACU).

Benefits

- Compact SWaP
- Ku- and Ka-band support
- Easy and quick installation on small vehicles or vessels
- Rapid auto-acquisition, tracking and reacquisition
- Optional integrated terminal including antenna, BUC and modem
- OpenAMIP Protocol



RaySat SR300

Technical Specifications

Mechanical

Antenna Size L x W x H*:**RaySat SR300Ku:**

20.4 x 19.3 x 10.3 in

51.8 x 49 x 26.2 cm

RaySat SR300Ka:

20.4 x 19.3 x 10.3 in

51.8 x 49 x 26.2 cm

Antenna Weight without BUC:**RaySat SR300Ku:**

35.3 lb (16 kg)

RaySat SR300Ka:

35.3 lb (16 kg)

Electrical

Frequency Band:****RaySat SR300Ku:**

Rx: 10.95–12.75 GHz

Tx: 29–30 GHz

RaySat SR300Ka:

Rx: 19.2–20.2 GHz

Tx: 13.75–14.5 GHz

Polarization:**RaySat SR300Ku:**

Linear

RaySat SR300Ka:

Circular

Tx Gain (typical):**RaySat SR300Ku:**

28 dBi

RaySat SR300Ka:

33 dBi

G/T (typical):**RaySat SR300Ku:**

6 dB/K

RaySat SR300Ka:

9 dB/K

Uplink Max EIRP**:****RaySat SR300Ku:**

44 dBW (40W BUC)

RaySat SR300Ka:

49 dBW (40W BUC)

Cross Pol (typical):**RaySat SR300Ku:**

25 dB

RaySat SR300Ka:

22 dB

IF Input (Tx):**RaySat SR300Ku:**

950–1450 MHz

RaySat SR300Ka:

950–2150 MHz

IF Output (Rx):**RaySat SR300Ku:**

950–2150 MHz

RaySat SR300Ka:

950–1950 MHz

Power Consumption*:****RaySat SR300Ku:****RaySat SR300Ka:**

50 W

Antenna Performance

Elevation Angle:**RaySat SR300Ku****RaySat SR300Ka:**

0°–90° (automatic tracking up to 80°)

Azimuth Tracking Rate:**RaySat SR300Ku/****RaySat SR300Ka:**

60°/s

Interfaces

Electrical Interfaces:**RaySat SR300Ku:**

Tx Input: WR75

Rx Output: TNC–Female

RaySat SR300Ka:

Tx Input: WR28

Rx Output: TNC–Female

OpenAMIP Protocol:**RaySat SR300Ku/****RaySat SR300Ka:**

Version 1.17

Environmental

Temperature Range:**RaySat SR300Ku/****RaySat SR300Ka:**

–40° to +131°F (–40° to +55°C)

Relative Humidity:**RaySat SR300Ku/****RaySat SR300Ka:**

Up to 95%

BUC Options:

BUC Options:**RaySat SR300Ku:**

16W, 25W, 40W

RaySat SR300Ka:

12W, 20W, 40W