



RAYSAT ER5000

Low-Profile Ka- and Ku- Band
SOTM Antenna



VERSATILE PLATFORM FOR SOTM

Satcom On-The-Move (SOTM) is a superb alternative for establishing continuous, reliable, quickly deployable broadband communications.

The RaySat ER5000 antenna is a low-profile, lightweight, ruggedized two-way antenna system that enables real-time Ka- and Ku-band satellite communications for video, voice and data. Its sturdy structure and compact small size allow implementation on a wide range of vehicles.

MAXIMUM THROUGHPUT

The RaySat ER5000 antenna maximizes throughput using high-efficiency waveguide panel technology. It features multiple onboard tracking sensors, which enable accurate tracking, shortest initial acquisition and instantaneous re-acquisition time after signal loss.

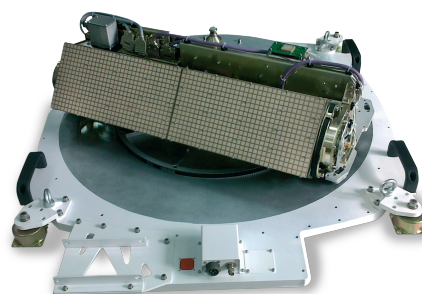
MODEM OPTIONS

For maximum flexibility, the ER5000 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 1.17 certified. When integrated with 3rd party modems, the antenna is supplied with an Antenna Control Unit (ACU).

BENEFITS

- Supports standard and extended Ku-band
- Supports commercial Ka-band
- Versatile platform, suitable for different vehicles
- Automatic acquisition and tracking of target satellite signal
- Optional integrated terminal including an antenna, BUC, and modem
- OpenAMIP Protocol



TECHNICAL SPECIFICATIONS: RAYSAT ER5000

MECHANICAL

Antenna Size L x W x H*:

RaySat ER5000Ku:
33 x 38.4 x 10 in
83.8 x 97.6 x 25.4 cm

RaySat ER5000Ka:
33 x 37.8 x 10 in
83.8 x 95.9 x 25.4 cm

Antenna Weight:

RaySat ER5000Ku:
92.8 lb (42.1 kg)

RaySat ER5000Ka:
96.1 lb (43.7 kg)

ELECTRICAL

Frequency Band**:

RaySat ER5000Ku:
Rx: 10.95-12.75 GHz
Tx: 13.75-14.5 GHz

RaySat ER5000Ka:
Rx: 19.2-20.2 GHz
Tx: 29-30 GHz

Polarization:

RaySat ER5000Ku:
Linear

RaySat ER5000Ka:
Circular

Tx Gain (typical):

RaySat ER5000Ku:
31 dBi

RaySat ER5000Ka:

36 dBi

G/T (typical):

RaySat ER5000Ku:
9 dB/K

RaySat ER5000Ka:
12 dB/K

Uplink max EIRP:

RaySat ER5000Ku:
47 dBW (40W BUC)

RaySat ER5000Ka:
52 dBW (40W BUC)

Cross Pol (typical):

RaySat ER5000Ku:
22 dB

RaySat ER5000Ka:
25 dB

IF Input (Tx):

RaySat ER5000Ku:
950-1700 MHz

RaySat ER5000Ka:
950-2000 MHz

IF Output (Rx):

RaySat ER5000Ku:
950-2150 MHz

RaySat ER5000Ka:
950-1950 MHz

Power Consumption***:

RaySat ER5000Ku/
RaySat ER5000Ka:
120 W

ANTENNA PERFORMANCE

Elevation Angle:

RaySat ER5000Ku/
RaySat ER5000Ka:
0°-90° (automatic tracking up
to 80°)

Tracking Rate:

RaySat ER5000Ku/
RaySat ER5000Ka:
150°/s

ELECTRICAL INTERFACES

Tx Input:

RaySat ER5000Ku:
WR75

RaySat ER5000Ka:
WR28

Rx Output:

RaySat ER5000Ku/
RaySat ER5000Ka:
TNC-Female

OpenAMIP Protocol:

RaySat ER5000Ku/
RaySat ER5000Ka:
Version 1.17

ENVIRONMENTAL

Temperature Range:

RaySat ER5000Ku/
RaySat ER5000Ka:
-40° to +131°F (-40° to +55°C)

Relative Humidity:

RaySat ER5000Ku/
RaySat ER5000Ka:
Up to 95%

BUC OPTIONS

BUC Options

RaySat ER5000Ku:
16W, 25W, 40W

RaySat ER5000Ka:
12W, 20W, 40W

* Height excludes dampers

** Factory Selectable

*** In case of GLT1000 modem