



Innovation in Antenna Technology



INNOVATIVE

The mobile S-band antenna for vehicular satellite communications provides advanced RF performance while maintaining an aesthetic, low-profile design. Designed for the new S-band Multimedia Satellite Systems, including Solaris Mobile, the antenna will enable next-generation services for both personal and commercial vehicles such as:

- » Media & Entertainment - TV and radio
- » Safety & Efficiency - eCall and ITS
- » Navigation & Information - maps, weather, traffic and more
- » Fleet management - tracking and on-board unit updating
- » Many more uses

The S-band gateway interfaces with your WiFi nomadic devices allowing you to use multiple devices at the same time including, personal navigation, smartphone, personal media players, and game console.

RECEPTION

The omni-directional antenna provides full azimuth coverage with a broad elevation beam to ensure operation over the largest possible coverage area. The omni-directional pattern assures you are always pointing at the satellite. Dual polarization allows reception of all satellite channels.

With a diameter of 10 cm and a thickness of 1.5 cm, the antenna design provides satellite reception in broad geographical coverage and seamless integration into the vehicle aesthetics.

INSTALLATION

The antenna is easily installed on any car using a magnetic mount on the bottom of the antenna casing. Since the antenna is omni-directional, no manual pointing is required. No matter which direction you travel, you will automatically be connected.

S-band Receive Only Antenna

JSO-1

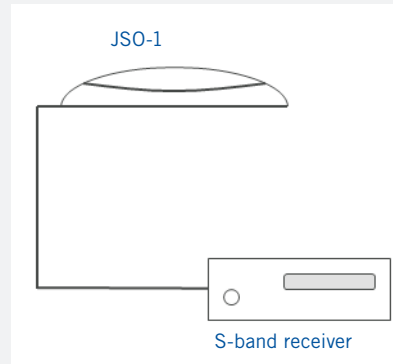


SPECIFICATIONS

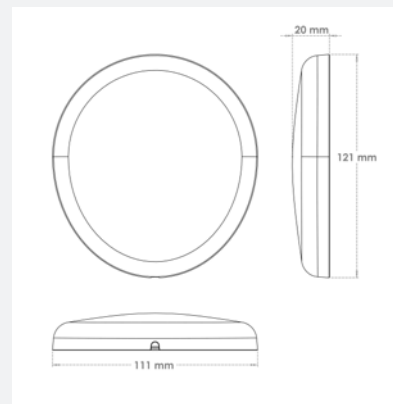
Antenna Characteristics

Frequency Band	2170 – 2200 MHz
Polarization	Dual Circular RHCP & LHCP with polarization switch Vertical at horizon for reception of terrestrial CGC
G/T	> -20 dB/K @ 25° < elevation < 70° > -21 dB/K @ 20° < elevation < 25° > -22 dB/K @ 15° < elevation < 20°
Cross Polarization	> 10 dB @ 25° < elevation < 70° > 7 dB @ 20° < elevation < 25° > 5 dB @ 15° < elevation < 20°
Elevation coverage	20° ≤ α ≤ 70° average (Depending on satellite power flux)
Azimuth Coverage	0° ≤ φ ≤ 360°
Noise Figure	< 0.8 dB @ 25 °C
Gain in Pass Band	27 dB ± 2 dB
Linearity	IP3 = +3 dBm
Temperature Range	-40°C to 80°C
Output	5 m RG180 coaxial cable with FAKRA 8021 female connector
Power Supply	+7V (RHCP) +9V (LHCP)
Installation	Magnetic or screw mounting
Color	Black
Housing Characteristics	Waterproof (IP65)

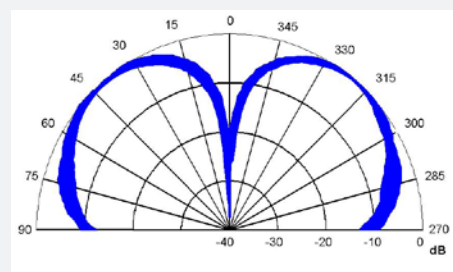
System Configuration



Antenna Dimensions



Typical Radiation Patterns



PSE-C CH-1015 LAUSANNE SWITZERLAND
TEL +41 (0)21 693 89.22 FAX +41 (0)21 693 89 20
WEB WWW.JAST.CH E-MAIL INFO@JAST.CH