

P r o d u c t S h e e t

SpeedRay™ 1000



► LIVE Satellite TV on Wheels

Bringing a variety of LIVE satellite TV channels to moving vehicles, the SpeedRay 1000 in-motion low-profile Ku band satellite antenna offers commercial transportation vehicles the ability to easily upgrade entertainment systems with LIVE TV CHANNELS and even offer individual in-seat channel choices – sports, news, children and family programming, movies and other channels.

With a growing trend in the transportation market towards comfort and entertainment, the SpeedRay 1000 offers new revenue opportunities for installers, dealers and fleet owners and access to multiple transportation sectors – **buses, RV's, VIP vehicles, trains and large private cars.**

► Strategic Business Opportunity

In the competitive transportation market, the added-value service of LIVE satellite entertainment can:

- Increase revenue margins
- Provide a strategic competitive advantage
- Increase customer satisfaction levels and generate preference

► SpeedRay 1000 Required System Components

- Low-profile antenna
- Roof mounting kit – for a variety of vehicles
- IDU (antenna control unit - internal)
- Set-top box – provided by local satellite TV provider

► International Market

Supporting TV services on Ku band satellites, RaySat antennas are completely independent of terrestrial infrastructure and can be pre-configured for use with different satellite TV services around the world.

Designed for Commercial Use

Ideal for commercial use in a variety of different markets, RaySat antennas have a:

- **Sleek design to complement vehicles' profiles**
- Low-profile and fits many size vehicles
- Automatic and autonomous operating system for easy use
- Rapid satellite tracking for reception at high speeds
- Satellite acquisition in < 1 min for quick signal reception
- Satellite re-acquisition in < 10 sec following Line of Sight blockage for a high-quality entertainment experience



RaySat
Satellite TV on Wheels



1-way low-profile in-motion satellite antenna

Physical	Outdoor unit size Outdoor unit weight Indoor unit size Indoor unit weight	115 L x 90 W x 15 H cm (45 x 35 x 5.9 in) 28 kg (62 lb) 18 L x 23 W x 7 H cm (7 x 9 x 3 in) 1 kg (2 lb)
Electrical	Antenna G/T Frequency band Polarization CP LP Power Supply Power Consumption	9.6 - 10.6 dB/K @ 30° elevation (factory options) High band 11.7 - 12.75 GHz Low band 10.95 - 11.7 GHz (Factory options) Dual circular RHCP/LHCP Dual linear, automatically adjusted (V&H) 10-30 VDC 40 Watts
Antenna Performance	Elevation look angle range Azimuth angle range Tracking rate Polarization angle range Satellite acquisition Satellite re-acquisition	Automatically adjusted, 20° - 80° (factory options) Automatically adjusted, 360° continuous 60°/second Automatically adjusted, -180° to +180° <1 minute, fully automated with integrated GPS <10 second (when LoS blockage is <2 minutes), integrated gyro
Satellite Service	Frequency Supports satellites with Supports regional DTH/FTA services	Ku-band EIRP ≥50 dBW Examples: North America - DISH® Network, Direct-TV Europe - Many FTA channels, SKY, Premier, Digiturk, etc. Asia/Pacific - Dish-TV, Big-TV, Foxtel, etc. Middle East - FTA channels on NileSat, BADR, etc.
Electrical Interfaces	RX and control	TNC, 50Ω
Environmental	Temperature range Ground speed	-25° to +55° C (-13° to +130°F) Up to 350 Km/h (220 mi/h)

Specifications subject to change without notice

About RaySat

Established in 1997, RaySat™, Inc is a leading manufacturer and supplier of in-motion, low-profile, phased-array satellite antennas and supporting technology for the mass transportation, public and private sector, maritime market, automotive OEM and automotive aftermarket industries. These antennas allow moving vehicles to receive live satellite television and real-time data. Among its many awards for its technology and innovation, RaySat is the 2005 recipient of the Frost & Sullivan Emerging Technology of the Year Award. Staffed by over 150 professionals, spanning three continents, RaySat's management, sales and support staff are headquartered in Vienna, VA. Additional facilities, including R&D and sales offices are located in Europe and Asia.