



SkyEdge™ DVB-RCS

Going beyond the standard

The SkyEdge™ DVB-RCS VSAT offers a high performance, two-way, satellite-based solution enabling interactive Broadband IP and multicasting applications based on the DVB-RCS standard return channel. For corporations, service providers, and carriers in search of an open-based standard solution for delivering services in a reliable and effective way, the SkyEdge DVB-RCS is the VSAT of choice.

One System for Standard & Multi-Service VSATs

The standard compliant SkyEdge DVB-RCS is the culmination of Gilat's deep knowledge base and field-proven experience in the Data (IP & Legacy) and Telephony (native & VoIP) fields. This powerful VSAT has the advantage of the internationally recognized standard, as well as being part of Gilat's SkyEdge family of products, bundling interactive data, broadband IP, and carrier-grade telephony on the same VSAT system.

The SkyEdge DVB-RCS VSAT has the value added capability of operating on Gilat's SkyEdge system along with the SkyEdge family of VSAT products. This versatility provides unparalleled advantages enabling the provision of flexible, tailored services for supporting diverse markets and applications.

Dual Mode Capability

The robust VSAT has the unique ability to operate in a dual mode. The SkyEdge DVB-RCS can operate in a standard-based mode or Gilat's mode. While operating in the DVB-RCS standard mode, the SkyEdge DVB-RCS is ideal for delivering interactive broadband IP and multicasting application to any location. It provides Internet access, corporate Intranet and VPN, IP multicasting, distance learning and all interactive broadband IP applications. High-speed forward and return channels increase throughput and guarantee efficiency and maximum performance for user applications. Switching from Gilat's mode to standard DVB-RCS mode can easily be implemented by downloading software to the VSAT, without the need for site visit.

Enhanced Standard

Above and beyond compliance to the DVB-RCS standard, SkyEdge DVB-RCS provides a variety of unique operational and performance enhancements. Embedded technologies such as IP and HTTP acceleration, embedded accelerated VPN, end-to-end QoS, encryption, tiered services and SLA support are only part of the extensive IP capabilities ensuring full flexibility and support in the most complex IP environment. As software is embedded into the VSATs, there is no need for external boxes or installation of software on the customer's PC.

In Gilat's mode the SkyEdge DVB-RCS provides additional access scheme capabilities and modulation methods for maximum efficiency and performance of your satellite network. By utilizing a highly efficient outbound supporting both 8 PSK modulation and turbo coding technologies, the SkyEdge DVB-RCS achieves a 30% improvement in bandwidth utilization over the standard QPSK DVB-S.

For optimal efficiency, the SkyEdge DVB-RCS is equipped with an advanced user interface with LCD and keypad navigator. This enables improved operation and maintenance of remote VSATs, providing a variety of value added services using the LCD display.





Technical Specifications

Forward Carrier:

- Standard: DVB-S
- Carrier bit rate: Up to 45 Mbps
- Modulation: QPSK or 8PSK optional
- Coding: Concatenated Reed Solomon and convolution FEC (Turbo optional)
- FEC rate: 1/2, 2/3, 3/4, 5/6, 7/8

Return Carrier DVB-RCS:

- Access Scheme: Standard DVB-RCS
- Bit rate: up to 2Mbps
- Modulation: QPSK
- Coding: Turbo coding 1/2, 2/3, 3/4, 4/5, 6/7

Return Carrier: (Gilat mode)

- Access Scheme: Combined TDMA, FDMA
- Bit rate: 60Kbps – 2Mbps
Supporting different bit rates for different work groups
- Modulation: GMSK
- Coding: Turbo coding FEC ~3/4, ~7/8

Outdoor Unit:

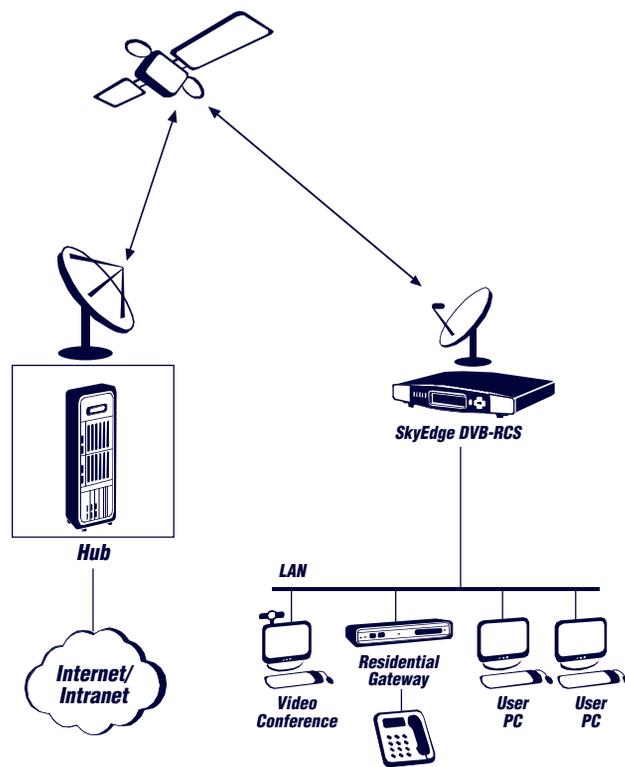
- Antenna Size (typical):
Ku-Band: 0.55m to 1.2m C-Band: 1.2m to 1.8m
- Operating Temperature: -40 to +60 C
- Humidity: Up to 100%
- Transmitter ODU:
Gilat mode: 2W or 4W Ku-band
DVB-RCS: Linear 1W, linear 3W Ku-band or linear 2W, linear 5W C-band
- LNB: Standard TVRO type

Indoor-Unit:

- RF Input/Output: Two F connectors, 75 Ω female
- Data Interface: 100BaseT
- Operating Voltage:
AC: Wide range 100-240V or DC: 12V
- Size: 300mm x 233mm x 50mm

Environmental Conditions:

- Operating Temperature: -5 to +50 C
- Storage Temperature: -40 to +70 C
- Relative Humidity: Up to 90%



Key Features

- Standard & multi-service VSATs (e.g. SkyEdge Pro & SkyEdge Call) on one network for a variety of applications
- DVB-S outbound
- 8 PSK outbound, turbo coding (Gilat mode)
- Embedded encryption support
- High inbound bit rate up to 2Mbps
- Unique support for small networks starting as low as 340 Kbps (Gilat mode)
- Enhanced IP features for full flexibility: RIP, IRDP, DHCP, NAT, IGMP, IP prioritization, ACL
- Embedded hardware based VPN
- Stand-alone unit with embedded TCP & HTTP acceleration
- QoS support for both upstream and downstream traffic
- Supports any standard IP application such as Broadband Internet/Intranet, VoIP, IP multicast, video conferencing
- Advanced user interface with LCD and keypad navigator
- Superior Reliability

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Gilat's **SkyEdge™** Product Family

SkyEdge™ Pro
Multi-Service VSAT

SkyEdge™ Call
Telephony VSAT

SkyEdge™ IP
IP Router VSAT

SkyEdge™ DVB-RCS
Enhanced Standard VSAT

SkyEdge™ Gateway
Trunking Solutions VSAT