

## RG-2000 Remote Gateway

The Shiron Satellite Communications RG-2000 is more than just a VSAT. It is the wedding of a two-way satellite terminal, an IP device, and advanced control software. These components function together to provide delivery of pure IP traffic for all access needs.

The RG-2000 is Remote Gateway provides broadband connectivity for ISP points of presence (POP), corporate offices, financial institutions, small and medium enterprises, hotels, and Internet cafes. The RG-2000 is ideal for

- Fast Internet Access
- Voice over IP Telephony
- Videoconferencing
- Interactive Distance Learning
- VPN (secure) Applications
- Reliable Business-To-Business (B2B)
- Cellular Bridging
- CRM
- Telemedicine
- Terrestrial Backup

The RG-2000 can either operate in PAMA mode (DVB outbound and SCPC inbound) or as an integral part of the InterSKY™ system. The advanced control software inside the RG-2000 acts as an agent of the central InterSKY™ Hub controllers. This software controls the modulator to provide Automatic Power Control (APC) and Automatic Frequency Control (AFC) that are part of the system optimization the space segment usage.

The RG-2000 supports return channel data rates from 16 Kbps up to 2 Mbps in 16 Kbps steps. This granularity allows the selection of the speed that provides the best match to the site needs. The 2 Mbps return channel is suited for high data rate sites including local area networks with hundreds of computers, multiple E1/T1 Voice Over IP connections, streaming video for telemedicine and distance learning, as well as videoconferencing.

The Traffic Analyzer in the Remote Gateway continuously monitors the outbound data needs and communicates with the Bandwidth on Demand (BOD) controller. The RG-2000 software contains an advanced Traffic Shaper to deliver IP quality of service.

## InterSKY™ RG-2000 Technical Specifications

### Indoor Unit

AC Power	100 to 240 VAC, 50/60 Hz, 150 Watts
LAN Interface	Ethernet (IEEE 802.3)
Operating System	Windows NT
L-Band Input Connector	F-Connector, 75 Ohm
L-Band Output Connector	N-type, 50 Ohm
Dimensions	483 x 442 x 178 (W x D x H) mm
Shipping Weight (with carton)	17 Kg.

### Transmitter - RG-2000

IF Range	L-band (950-1525 MHz)
Access	FDMA, DAMA & Bandwidth On-Demand
Modulation	QPSK (SQRT Raised Cosine, alpha=0.35)
Coding	Convolutional Code R=1/2, 3/4
Information Rate	16-2000 Kbps in 16 Kbps Resolution
Signal Level	-30 to -5 dBm
Data Interface Input/Output	Ethernet, 10/100BaseT, Autodetect
Transmission Type	Continuous

### Receiver

IF Range	L-band (950-2150 MHz)
Access	DVB/S
Modulation	QPSK (as per DVB-S)
Signal Level	-65 to -35 dBm

### Outdoor Unit

RF Frequency Band	C, Extended C, Ku, Extended Ku
Transmit level	C-band: 2-10 Watt, Ku band: 1-4 Watt Higher power available upon request
Receiver	Low-cost Standard DRO LNB
Power Supply	24 VDC, Supplied via RF Cable
Frequency Reference	10 MHz, Supplied via RF Cable

### Environmental Conditions

Indoor Unit	
Operating Temperature	0° to +40° C
Storage Temperature	-20° to +70° C
Humidity	5% to 95% Non-Condensing
Altitude	Up to 10,000 Feet

Outdoor Unit	
Operating Temperature	-40° to +55° C
Storage Temperature	-40° to +70° C
Relative humidity	Up to 100%
Altitude	Up to 10,000 Feet
Standard Compliance	FCC, CE, UL
Standard Conform	DVB-S, IESS-308, ETSI TBR 28