

Remote Multichannel Receiver



# Datasheet

### Typical Users

- Oil & Gas
- Cruise and Cargo
- Corporate Enterprise
- Service Provider Multi-Tenant Environments
- Non-Governmental Organization (NGO)
- Mobile Network Operators
- Media
- Government

#### **Common Applications**

- Maritime, Offshore & Mobility Communications
- Latency sensitive Business Applications
- IP Trunking & Internet Access
- Mobile Backhaul
- Satellite News Gathering
- Content Distribution Networks

#### **Overview**

The Heights<sup>™</sup> Networking Platform is engineered to elevate your services with unparalleled horsepower, efficiency and intelligence. The features within the platform were designed with the service provider and its multi-tenant environments in mind, from concept to operation.

OMTECH

We combine our most efficient waveforms, header and payload compression engines, proven dynamic bandwidth and power management along with bidirectional ACM capability to provide the highest user throughput, highest availability, and most optimal resource utilization available in the industry.

It is designed to meet the demands of those operating on traditional wide beams while providing distinct advantages for those with High Throughput Satellites (HTS) in their futures. Heights is HTS ready, providing the lowest cost highest throughput solution for feeder link teleports supporting fixed or remote terminals, scaling from tens to thousands of sites economically.

## **Dynamic Mesh Connectivity Between Remotes**

Occasional, dynamic mesh connections between remote sites is supported by remote-to-remote Single Hop Connections on Demand (SHOD) in router mode operation, using additional receivers at the remote. Dynamic Mesh eliminates double hop latency as remote-to-remote packets don't have to transit through the hub. It also requires 50% less bandwidth as a remote-to-remote double hop link would consume almost twice the bandwidth.

HRX-16-R is intended to be used at remote sites along with Heights Remote Gateways for Dynamic MESH. HRX-16-R includes 8 receivers enabling a remote site to dynamically MESH with up to 8 other remote sites with H8 or H16 Remote Gateways.

## **Specifications**

### HRX-16-R Remote Multi-Channel Receiver

Demodulators	8
User IP Data Rate	Up to 16 Mbps IP throughput per channel subject to symbol rate, MODCOD and optimization
Symbol Rate	16 ksps to 5 Msps
(Each Demodulator)	(Minimum 37 ksps for QPSK, 60 ksps for
	8-ARY, 100 ksps for 16-ARY and 250
	ksps for 32-ARY)
WAN Data Rate	16 kbps to 10 Mbps (Modulation and FEC
(Each Demodulator)	dependent)
FEC	VersaFEC-2
Operating Frequency	950 to 2150 MHz, 100 Hz resolution
Operating Bandwidth	All carriers within 70 MHz

Connector	Type N (female), 50 $\Omega$
Input Power Range, Desired Carrier	-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBm
Power & Environmental	
Power Supply	100-240 VAC, 47Hz-63Hz IEC 320 input 48 VDC (HW option)
Operating Temperature	0 to 50°C
Storage temperature	-40 to 85°C
Humidity	95% maximum, non-condensing

# Hardware Options

48 VDC, Primary Power Supply