

UHP-200

HIGH THROUGHPUT SATELLITE ROUTER



SCPC

TDM/TDMA

Hubless TDMA

UHP-200 is a satellite IP router with the industry-highest processing capability, which expands the UHP series of software-definable VSAT products. UHP-200 is based on a new advanced hardware platform and is backward compatible with previous generations of UHP routers. It comprises multi-channel DVB and MF TDMA demodulators, a universal SCPC/TDMA modulator and a powerful IP router. The primary application of UHP-200 is in Hub stations of large networks, where multiple UHP-200 routers can be cascaded. This satellite router is also a good fit for complex remote TDM/TDMA or Hubless TDMA terminals with high throughput and multi-mode operation. Innovative algorithms for network access, resource allocation and data encapsulation as well as advanced modulation and coding, implemented in the UHP routers, ensure efficient utilization of satellite resource.

Six built-in demodulators allow simultaneous reception of two TDM or SCPC carriers and four TDMA mesh carriers from two distinct satellite beams or from two antennas. Universal modulator can instantaneously switch from TDMA burst mode to SCPC mode, thus assuring high data throughput and efficiency.

UHP-200 router is supplied in a compact 1U chassis for installation in a standard 19 inch rack. Universal mount brackets allow installation with either the indicator panel or the connector panel facing forward. Built-in AC power supply with high power rating and 10 MHz frequency reference ensure reliable operation of the router itself and of the outdoor RF equipment from multiple vendors.

NETWORK

Topology	'point-to-point', 'hub and spoke', 'multilevel tree', 'mesh'
Modes of operation	SCPC, SCPC DAMA, TDM/SCPC, TDM/TDMA, TDM/TDMA Mesh, Hubless TDMA
Network role	SCPC modem, TDM/TDMA terminal or Hub, Hubless Slave or Master
Frequency bands	C, X, Ku, Ka, including multi-beam HTS satellites

MODEM

	SCPC (TDM)	TDMA
Demodulator	Two demodulators with separate IF inputs	Four demodulators with common IF input
Modulations	QPSK, 8PSK, 16APSK, 32APSK	BPSK, QPSK, 8PSK
FEC	1/3 - 9/10	2/3, 5/6
Symbol rate	300 kSps - 65 MSps	100 kSps - 8 MSps
Data rate	up to 210 Mbps	up to 20 Mbps
QoS	4-level prioritization, traffic policies, CIR, hierarchic traffic shaper, FAP	CIR, MIR, group QoS, hierarchic manager of TDMA bandwidth
ACM	12-channels DVB-S2 ACM	Adaptive return channels

ROUTER

Performance	up to 300'000 packets per second, 450 Mbps aggregate throughput, 750 voice calls compressed
Support	DSCP, multiple IP/VLANs, NAT, proxy ARP, L2 Bridging, TCP Acceleration
Protocols	DHCP, IGMP, SNMP, RIP, SNT, TFTP, cRTP
Management	HTTP interface, SNMP, Telnet, NMS with VNO support

INTERFACES

User LAN	2 x Gigabit Ethernet, RJ-45
Maintenance console	USB, B female
IF Rx	950-2050 MHz (LO 10 MHz / +5 dBm, LNB DC - 13.5V/18V 0.75A), F type
IF Tx	950-1950 MHz, -30...- 5 dBm, (LO 10 MHz / +5 dBm, BUC DC - 24V / 2A), F type
AUX IF	Rx pass-through, Tx monitor

MECHANICAL / ENVIRONMENTAL (IDU)

Power	176-283 VAC, 10 W
Operating temperature	0°...+50°C, humidity up to 90%
Size / Weight	440x44x135 mm / 1.7 kg

Specifications and product data are subject to change without notice