

## Wideband Satellite Router



Wideband Satellite Router UHP-232 represents a significant extension of the HTS series of multi-beam/multi-satellite UHP Hubs. The new HTS Hub supports wideband DVB-S2/S2X Outbounds (forward link) carrier with symbol rate up to 200 Msps.

The UHP-232 router comprises the new HUBMUX feature which is based on the Time-Slicing DVB-S2X standard and facilitates scalability in the Hub. The HUBMUX feature enables aggregation of multiple TDM/TDMA networks and SCPC links in a single wideband carrier up to 240 MHz. HUBMUX is compatible with UHP-100 and UHP-200 series routers and permits use of compact low-cost terminals in very large VSAT networks with wideband HTS transponders.

This product optimizes utilization of wideband HTS transponders. Different services (and the associated business models) can operate over a single wideband carrier with a full traffic isolation of constituent networks.

UHP-232 wideband router also includes a DVB-S2/S2X demodulator that can be used as a control receiver for the UHP Smart Redundancy or as a spectrum analyzer. This router is supplied in a 1U chassis for installation in a standard 19-inch rack.

### Key Features:

- 1U Rack-mountable wideband satellite router for HTS Hubs
- Efficient DVB-S2/S2X ACM modulations with 5% or 20% roll-off and support for wideband HTS transponders
- Single-signal transponder operation up to 240 MHz per carrier
- Wide range of symbol rates: 300 ksps – 200 Msps
- HUBMUX feature with support for 4 subnetworks
- Aggregation of TDM/TDMA Hubs or SCPC channels in a single wideband carrier
- 650 Mbps aggregate throughput per carrier
- Multiple services in the same carrier for diversification of applications and customers
- Dedicated bandwidth and full traffic isolation of embedded networks
- Efficient use of HTS capacity and new dimension of VNO cooperation
- Pay-as-you-grow HTS Hub infrastructure
- Hot-standby M:N Smart Redundancy option

### Applications:

- High-performance TDM/TDMA networks for HTS with slicing and load balancing
- Ultra high speed SCPC channels for GSO and NGSO satellites
- Multiservice VNO networks with dedicated virtual Hubs and traffic isolation

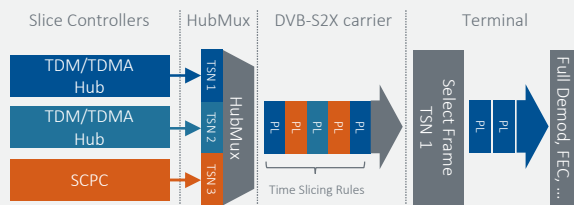


## TECHNICAL SPECIFICATIONS: UHP-232 WIDEBAND SATELLITE ROUTER

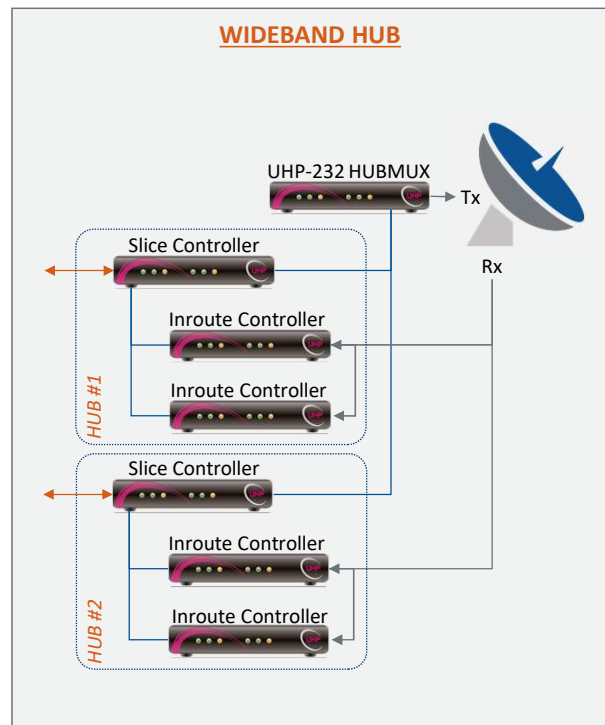
NETWORK	
<b>Network role</b>	Wideband modulator of HTS Hub with HUBMUX feature; Control TDM receiver for Smart Redundancy; Spectrum Analyzer
<b>Number of slices</b>	Up to 4 time-slices 64 Msps each
MODULATOR	
<b>Standard</b>	DVB-S2 / DVB-S2X with Adaptive Coding and Modulation
<b>Channels</b>	One wideband modulator
<b>Modulation</b>	QPSK, 8PSK, 16APSK, 32APSK, 64APSK, 128APSK, 256APSK; Roll-off: 5% or 20%
<b>FEC</b>	Most of DVB-S2 & DVB-S2X MODCODs
<b>Symbol Rate</b>	300 ksps - 200 Msps; step 1 ksps; minimum 300 ksps per each slice
<b>Data Rate</b>	Up to 650 Mbps
INTERFACES (MODULATOR)	
<b>User LAN</b>	1 x Gigabit 10/100/1000 Base-T
<b>IF Tx</b>	950-2150 MHz, -1...-46 dBm; Ref. 10 MHz/+5 dBm; F type
INTERFACES (ROUTER)	
<b>User LAN</b>	2 x Gigabit 10/100/1000 Base-T
<b>Maintenance console</b>	miniUSB, B female
<b>IF Rx (both inputs)</b>	950-2150 MHz; Ref. 10 MHz/+5 dBm [RX1]; 13.5/18 VDC 0.75A; F type
MECHANICAL / ENVIRONMENTAL	
<b>Power</b>	90-264 VAC or 24 VDC; 15 W
<b>Operating temperature</b>	0...+50 °C
<b>Size / Weigh</b>	440x44x170 mm / 2.3 kg

### DVB-S2X ANNEX M TIME-SLICING

- Operation in wideband mode, without requiring a full-speed decoding of the total carrier capacity
- Suitably mapping the services in multiple time-slices
- A time-slice corresponds to one PL-Frame
- Terminals select and decode a specific time-slice only
- Slice Controllers (may act as SCPC or OC) prepare PL-Frames with unique TSN and deliver it to HubMux
- HubMux transmits time-slices within a single carrier
- Return channels are associated with the respective slice controller and transmitted via separate carriers



### WIDEBAND HUB



REV-3.7-JUN21-PRELIMINARY | SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE