



SBM-90X Wideband GEO/LEO/MEO SCPC/MCPC Modem

The SBM-90X Wideband is an Extreme High Throughput SCPC/MCPC modem suitable for GEO/LEO/MEO Satellites

Applications and uses

- Broadband trunks
- Community Internet Access Distribution
- 3G/4G/LTE/5G cellular backhaul (Optional)
- Multi-stream, Multicast
- Dynamic video-stream contribution applications
- Mobile applications
- Fiber Mission-critical backup links.
- Dynamic-throughput BoD high-capacity links.
- Surveillance, government, defense and military.
- GEO/MEO/LEO applications

Features

- Up to 1.47 Gbps aggregate throughput
- Software Defined Network support
- Indoor 19" rack-mountable
- LCD Active Front panel for easy configuration
- Vast deployment flexibility
- Supports hub-less point-to-point deployments as well as Point to Multi Points
- Layer-2 and Layer-3 support
- Quality of Service (QoS)
- Built-in PEP (Performance Enhancing Proxy) enhancing user experience and conserving satellite bandwidth usage, optimizing the link in both in both point-to-point SCPC deployments and in hub-spoke mode.
- Header and payload compression
- OpenAMIP antenna interface support for SATCOM on the Move (SOTM) applications
- AES-256 Encryption - Optional



Specifications

Unit Characteristics

Form Factor	19" Rack mountable
Installation	<ul style="list-style-type: none"> • Indoor • IP65 weather proofed - Optional • Matching variety of outdoor / RF options: C-band, X-band, Ku-band and Ka-band • OpenAMIP antenna integration, GPS integration for on-the-pause / on-the-move applications
Typical Applications	<ul style="list-style-type: none"> • Telecomm: Trunking , community Internet distribution, 3G/4G/LTE/5G cellular backhaul • Professional: Mobile applications, video contribution • Surveillance, government, defense and military • Point-to-point or Point to Multipoint

Forward Link / RX

Technology	DVB-S2X TDM Forward Link.
Channel Rate	500 ksps to 125 Msps 250 Msps and 500 Msps - Optional
Waveform	DVB-S2X ACM or CCM, GSE encapsulation, BPSK up to 256APSK LDPC/BCH
Channel Spacing	5%, 10%, 20%, 25% or 35% channel spacing (roll-off factor)
Terminal IFL Input	50 Ohm N type- 950 - 2150MHz satellite / band independent
Link variation mitigation	Terminal built-in Uplink Power Control (ULPC) with ACM supporting Ka, Ku and C-band

Return Link / TX

Technology	DVB-S2X TDM Return Link
Channel Rate	500 ksps to 125 Msps 250 Msps and 500 Msps - Optional
Waveform	DVB-S2X ACM or CCM, GSE encapsulation, BPSK up to 256APSK LDPC/BCH
Channel Spacing	5%, 10%, 20%, 25% or 35% channel spacing (roll-off factor)
Terminal IFL Output	50 Ohm N type- 950 - 2150MHz satellite / band independent
Link variation mitigation	Terminal built-in Uplink Power Control (ULPC) with ACM supporting Ka, Ku and C-band

IP Services, PEP and QoS

Interfaces	2 x 1GbT user data Eth RJ-45 ports, 1x out-of-band modem management Eth port
Download Speed	Up to 736 Mbps
Upload Speed	Up to 736 Mbps
Connectivity	<ul style="list-style-type: none"> • Layer-2 bridging, VLAN, MPLS and VRF (Virtual Routing and Forwarding) support • Full multicast support from hub or from behind remote • Layer-3, OSPF, RIP, SDN switch • Built-in SDN controller: control plane for static/dynamic routing (MPLS, BGP etc.)
Application Optimization	TCP/IP and HTTP acceleration GTP acceleration - optional
QoS	<ul style="list-style-type: none"> • Built in embedded QoS DSCP, MPLS QoS for Multiservice Network • ToS support integrated with Forward and Return Link ACM
Packet Handling	2,000,000 pps (1,000,000 pps in each direction)

Environmental and Mechanical

Dimensions	435 x 45 (1RU) x 292 mm (W x H x D)
Weight	~ 5Kg
Power Consumption	48W
Power Output	100W