

### ASAT™ Gateway HTS/VHTS Multi Spot Beam Multi Service Platform

SpaceBridge understand the challenges of running complex SATCOM operations, especially providing links of highly varied speeds and SLAs over HTS/VHTS MSB New generation satellites.

We've designed ASAT™ GW System as a multi service solution to ease these pains. ASAT™ System manages advanced HTS/VHTS Multi Spot Beams Space Assets connectivity in the ground, from entry level links such as consumer satellite terminals, alongside high-end trunking and SoTM terminals and up to the level of tactical defense connectivity infrastructures, allowing both common management as well as complete bandwidth sharing that provides operators with optimal network-wide efficient bandwidth utilization and reduction of the total cost of ownership.



#### Features and Benefits

- High spectral efficiency supporting DVB-S2X outbound carrier up to 500Msps up to 4 Feeder Beams in one 42U Rack – total 2Gsps from QPSK to 256APSK, total 14Gbps
- Return Link Technology DVB-RCS2 RLE, up to 4 Clusters in one rack of 42RU– Each cluster can host up to 6\*32Mhz \* ~ 768Mhz , 2304 Inbound Carriers ,16QAM and 5% ROF
- Extensible to support hundreds of thousands terminals. Virtual Network Operation (VNO)
- 3D BoD™ bandwidth-on-demand, Return Link technology encompassing MF-TDMA and SCPC and ASCPC- all within a single shared dynamic bandwidth pool.
- WaveSwitch™ 3D BoD™ capacity assignment (SLA, real time demand and on-the-fly waveform optimization)

#### Application and uses

- Consumer Internet
- Small office/home office (SOHO),
- Tactical military, defense and homeland security (HLS) applications
- Small/Medium Enterprise (SME) and remote branch office connectivity.
- Industrial IoT and M2M applications
- Trunking and cellular backhaul for MNO
- Mobile maritime, land, airborne applications

### Inbound Gateway Technology

DVB-RCS2 RLE Encapsulation	Up to 4 Clusters in one rack of 42RU- Each cluster can host up to 6*32Mhz *4 ~ 768Mhz, 2304 Inbound Carriers
----------------------------	--

### Outbound Gateway Technology

Outbound	DVB-S2X outbound carrier up to 500Msps up to 4 Feeder Beams in one 42U Rack - total 2Gsps from QPSK to 256APSK, total 14Gbps.
	FW link ACM IP Encapsulator GSE with 5% RoF

### Gateway Access Technology, Architecture

Multi Spot Beams HTS	Multi Spot Beams HTS, Geographical Redundancy , Adaptive Satellite Access Technology (A-SAT™) 3rd generation with WaveSwitch™
	Up to 20,000 VSAT terminals in a M:N complete redundancy
	Supports both Star, Mesh, PtP and PtmP

### Networking

Networking	Full Layer2 and Layer3 Ethernet and IP services.
	QoS- Quality of Service function in multiple queues for each MODCOD, QoS per site, group, service etc.
	PEP -Performance Enhanced Proxy, TCP and HTTP acceleration, Payload and header compression, HTTP pre-fetch

### Management

Management	NMS Support up to 20,000 users in one single 42R
	FCAPS: Fault, Configuration, Accounting, Performance, Security, 100% GUI, Customized dashboard (KPIs).
	Virtual Network Operation Supported (VNO)
	Easy integration with external OSS and BSS, API and REST