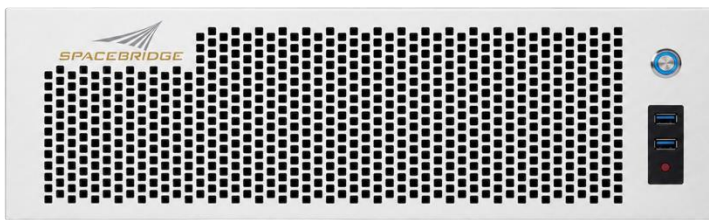


UniHUB NIB: Provides a fully integrated and compact advanced TDMA and dynamic SCPC Network-in-Box (NIB) solution to support your HUB requirements. It encompasses multiple modulators, high capacity burst demodulator, gigabits per second gateway packet processing, network synchronization and timing, full network scheduling, and management and control (NMS) within a compact 3U chassis.



UniHUB builds on the Estella Core intelligence in a radically compact form. Combining SpaceBridge's advanced 3D Time Division Multiple Access (TDMA) Waveform, our SCPC WaveSwitch™ waveform, and our Dynamic Rate Assignment (or Burst Mode-Frequency Division Multiple Access; BM-FDMA) features together to offer a SATCOM solution which can meet any operator requirement everywhere.

The UniHUB compact form is designed for simplicity and to facilitate rapid deployment so you can get your network and services up and operational in short order.

Key Features

- Maximum Capability, Minimal Footprint
- No external equipment
- No complex rack integration
- Minimal cabling & power
- Rapid installation
- Simplified maintenance and logistics
- Dynamic network automation and performance optimization

Key Benefits

Ideal for:

- Space-constrained teleports
- Co-location environments
- Rapid expansion sites

Reduces:

- Rack space
- Power consumption
- Cooling requirements

Enables:

- Lower teleport CAPEX
- Faster scaling

BURST DEMODULATOR CHARACTERISTICS

RX Burst Demod Capacity	80MHz
Return Link FEC	RCS2 (TPhi)/WaveSwitch™
License Based	YES
Min carrier	160kHz
Largest Carrier	20MHz
Min WaveSwitch™ carrier	200kHz
RO/Spacing factor	down to 5%
Number of carriers	400
MODCOD	BPSK, QPSK, 8PSK, 16QAM, 32QAM, 64QAM
Block sizes	266, 536, 1616
# of Waveforms	60
Variable MODCOD/frame	YES
Dynamic Rate Assignment (DRA)	YES
Frequency range	950-2400MHz
Return Link Fade Mitigation	Dynamic Rate Assignment (DRA) coupled with dynamic Waveform provide per site ACM capability.

UniHUB INTERFACE

Connector Type	5xSMA : 2x RX, 2x TX
Return Loss	>+ 12 dB
Carrier Signal to Noise ratio	-15.6 to +18.5 dB (lowest is DSS Repetition 16, BPSK, CR 1/3; Highest 64 QAM CR 6/7)
10 MHz Ref Clock Input	BNC: -5 to +15 dBm (50 Ohm) sinus reference input
1 PPS Input	BNC: 1PPS input TTL/50 Ohm
10 MHz Ref Clock Output	SMA



MODULATOR CHARACTERISTICS

Number of modulators	2x 80MHz modulators (each modulator can support multi-carrier partitions)
Waveform/FEC	DVB-S2/S2x QPSK, 8PSK, 16APSK to 256APSK, Short and Normal Frame)
RO/Spacing factor	down to 5%
License Based	YES
Output	+7 dBm to -35 dBm / SMA 50 Ω
Frequency range	950-2150MHz
PCR insertion	Yes

Compute INTERFACE

User Data Interface	2x RJ45 (10Gbase-T)
MGMT Interface	4x RJ45 (100/1000baseT)
Monitor and Control	Web Server (HTTPS) Syslog (encrypted)

MECHANICAL ENCLOSURE SPECS

Form factor	Server format
Dimensions (WxHxD)	WxHxD: 19 " x 3 RU x 26"
Weight	14 kg
Power	Redundant hot-swap: 90-130 & 180-260Vac, 125 VA, 47-63 Hz, 200W
Operating Conditions	0°C to 50°C
Storage Conditions	-20°C to 85°C
Humidity	10% to 90% humidity, non-condensing