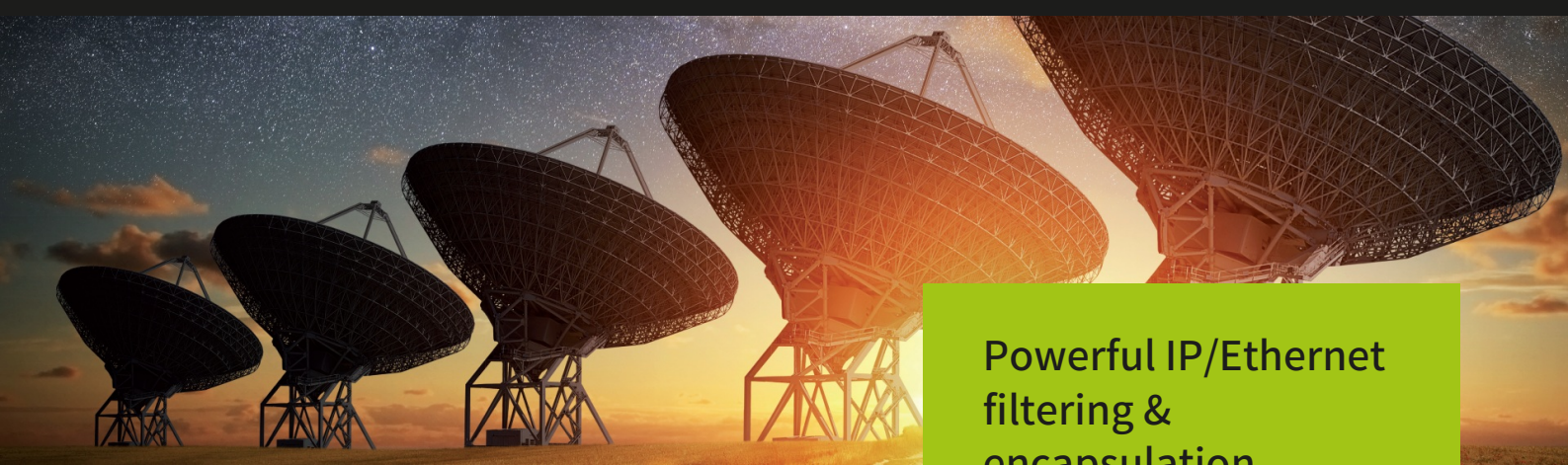


SmartGate S2/S2X

IP/Ethernet Satellite Gateway and Modulator



Powerful IP/Ethernet filtering & encapsulation capabilities combined with an advanced high quality modulator for optimized IP applications over satellite.

SmartGate S2/S2X is the ideal solution to manage IP transmissions over Satellite. The SmartGate powerful IP/Ethernet filtering allows you to select any type of service, performs the IP datagram encapsulation by hardware for ultra low latency according to MPE or GSE standards and transmits according to DVB-S2 or DVB-S2X standards. Its Multiqueuing ACM process allow you to manage QoS per service.

IP/Ethernet Input Management

SmartGate handles enhanced filtering & QoS through its 1 GigE and 10 GigE ports. The product offers GSE and MPE encapsulation with up to 4000 components and complete with traffic management tools.

Full DVB-S2 & S2X Standards and more

SmartGate integrates the latest FPGA technology required to perform high-quality modulation based on the DVB-S2 and DVB-S2X standards from VL-SNR up to 256 APSK. It also offers VCM/ACM multiqueuing up to 8 queues with bit rate adaptation for a perfect output.

Crystal Spectrum and wide band

SmartGate covers the full L-Band spectrum range (950/2150 MHz) with a SR from 0.05 to 120 MSymbol/s and roll-off factor from 5 to 35% with a very high SNR value, excellent shoulder levels and lowest phase noise with 200Mbps useful bitrate

Easy Upgrade Existing VSAT Systems

With its standard interfaces, SmartGate can be fully controlled remotely by its GUI or SNMP for an easy and quick integration into any systems. Improve efficiency (Wideband, DVB-S2X), flexibility (ACM/VCM multiqueueing) and reliability (NCR insertion, VRRP input redundancy).

SmartGate S2/S2X

IP/Ethernet Satellite Gateway and Modulator

Applications

- IP Backhauling
- OTT Contribution / Broadcasting
- IoT (Internet-of-Things) Connectivity
- VSAT systems

Other benefits

- MPE & GSE Encapsulation
- Traffic Management and QoS
- IP Level 2 & 3
- Ultra low latency
- Multiqueuing ACM and Bitrate adaptation

Technical specifications

DATA I/O

Ethernet Port

- 4 Ethernet ports 1 GigE - RJ45
- 2 Ethernet ports 10 GigE - RJ45 or SFP+

ASI Interface

- 8 ASI Inputs - BNC - 75 Ω
- 1 ASI Output - BNC - 75 Ω

DATA PROCESSING

MPE Encapsulation

- Up to 4000 independent components (PID)
- L2 or L3 Multiprotocol encapsulation (DSM-CC)
- Standard & QinQ VLAN support
- MAC mapping
- Section packing
- Traffic Management (shaping, policing, priority)
- Program Clock Reference (PCR) Insertion

GSE Encapsulation

- Standard ETSI TS 102 606-1
- Up to 4000 routes
- Network Clock Reference (NCR) Insertion
- MAC mapping

Modulation

- DVB-S2 & DVB-S2X:
- BCH / LDPC (all code rates)
- Constellations: QPSK, 8PSK, 16APSK to 256APSK
- Operating modes: CCM, VCM & ACM, 8 queues
- Frame length: Short & Normal

Carrier

- Symbol rate: 0.05 to 120 MSymbol/s
- Standard and custom roll-off from 5 to 35 %
- PL Scrambling codes
- Pilots insertion

DVB Carrier ID

- Compliant to ETSI TS 103 129 Standard

RF OUTPUTS

L-Band Main Output

- L-Band: 950 MHz to 2150 MHz,
- +7 dBm to -35 dBm / N 50 Ω ,
- 10MHz reference insertion

L-Band Monitoring Output

- Copy of L-Band Main Output
- 20 dB below / SMA 50 Ω

CONTROL & MANAGEMENT

Web UI

- HTML5 Technology
- Live statistics & monitoring

SNMP

- SNMP v2 support
- TRAP & INFORM notifications

Front Panel

- Full control & monitoring

Serial link

- RS232 / DB9 Connector

SmartGate S2/S2X

IP/Ethernet Satellite Gateway and Modulator

PHYSICAL

Height x Width x Depth

44 mm / 1.7 in. x 483 mm / 19 in. x 376 mm / 14.8 in.

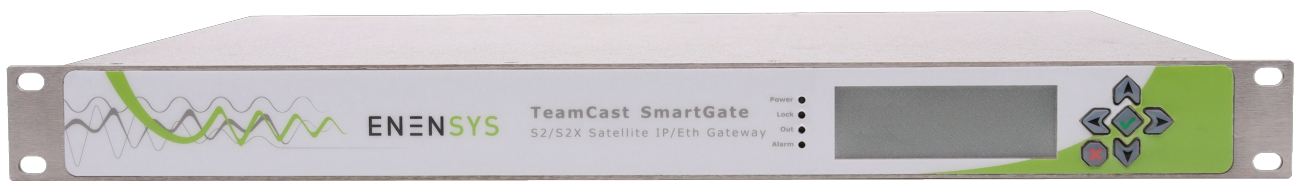
Format - Weight

1RU, 19" width - 8 kgs

Power Supply - Power Consumption

100/240 VAC - 100 W

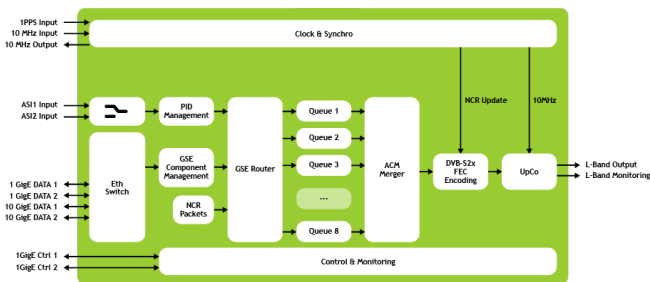
Front



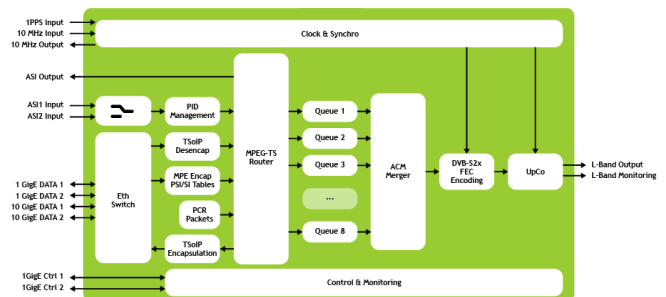
Back



SmartGate GSE



SmartGate MPE



SmartGate S2/S2X

IP/Ethernet Satellite Gateway and Modulator

Ordering codes

XSSR-SGT0-3000

SmartGate: IP S2/S2X Satellite Gateway - MPE - GSE -
QPSK/64APSK - L Band - 72 Mbaud

Ordering options

XSSO-SGT0-256A

256APSK constellations

XSSO-SGT0-LSNR

VL-SNR modes

XSSO-SGT0-120M

Symbol Rate < 120 MBauds