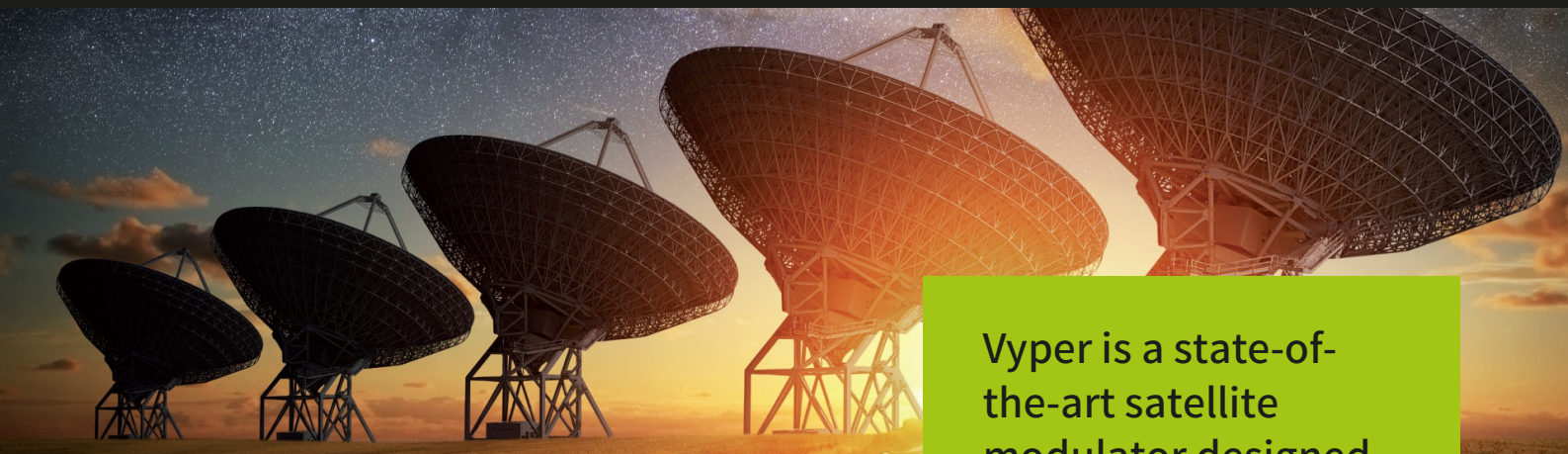


Vyper

Broadcast Satellite Modulator



Vyper is a state-of-the-art satellite modulator designed for any MPEG-TS TV application compliant to DVB-S, DVB-DSNG, DVB-S2 and DVB-S2X standards.

Vyper is a satellite modulator which has been designed to be able to cover any TV application over satellite. It naturally comes with Full L-Band & IF interface as well as 4 ASI inputs, two Ethernet inputs and manages simultaneously up to 6 TS streams to fit any system architectures. Managing symbol rate up to 80 MSymbol/s for all DVB Standards, Vyper can cover 36 MHz, 54 MHz and 72 MHz transponder applications.

All DVB Standards

Based on the latest FPGA technology, Vyper performs high quality modulation process compliant to DVB-S, DVB-DSNG, DVB-S2 and DVB-S2X standards for constellations up to 256 APSK.

Flexible Platform

Vyper is equipped with all input / output interfaces, provides all standardised features and smart switching capabilities to fit any redundant system architectures.

More bit rate

Vyper RF output quality constitutes a best-in-class performance, providing high SNR value, to improve your budget link and increase your bit rate.

More carriers

Out of band quality and excellent signal shoulder levels allows you to increase the number of carriers per transponder.

Applications

- DSNG – Contribution
- TV Distribution to Tower
- Single Illumination system
- DTH Broadcasting

Other benefits

- All-In-One : Only one Product for all applications
- Up to date and upgradable platform
- Flexible thanks to its numerous interface
- High RF Quality to increase your payload

Technical specifications

DATA I/O

Ethernet Port

4 Ethernet ports 1 GigE - RJ45

ASI Interface

4 ASI Inputs - BNC - 75 Ω

1 ASI Output - BNC - 75 Ω

DATA PROCESSING

Input Formats

- DVB MPEG-TS over ASI: EN50083-9, ETSI TR 101 891
- DVB MPEG-TS over IP: ETSI TR 102 034
- MPEG-2 PSI Tables (PAT and PMT): EN 300 468

DVB-S, -DSNG, -S2, -S2X Modulation

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

Multistream

- Up to 4 Streams (ISI)
- Independent MODCOD per stream

Scrambling

- BISS1 0/1/E
- BISS2 0/1/E/CA

Input features

- Bit rate adaptation modes
- Null Packets/Padding/Advance Padding
- Redundancy switching between inputs
- Physical layer / TS Synchro / Network Jitter

Carrier

- Symbol rate: 0.05 to 80 MSymbol/s
- Standard and custom roll-off from 5 to 35 %
- PL Scrambling
- Pilots insertion

Predistortion - ESP

- Linear & Non-Linear
- Manual Adjustment

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
- 10 MHz Reference insertion

L-Band Monitoring Output

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

IF-Band Main Output

- IF 50 MHz to 180 MHz
- +5 dBm to -35 dBm / BNC 75 Ω

IF-Band Monitoring Output

- Image of IF signal @ 1.21 GHz
- -35 dBm / SMA 50 Ω

CONTROL & MANAGEMENT

Web UI

HTML5 Technology - Control & Monitoring

Front Panel

Full control & monitoring

SNMP / MIB

v2 support - TRAP & INFORM mechanism

Serial Link

SCPI _ Control & monitoring

PHYSICAL

Height x Width x Depth

44 mm / 1.7 in. x 483 mm / 19 in. x 350 mm / 13.7 in.

Weight / Format

4.9 kgs / 1RU, 19 in. width

Power Supply / Power Consumption

90-240 VAC / 45 W

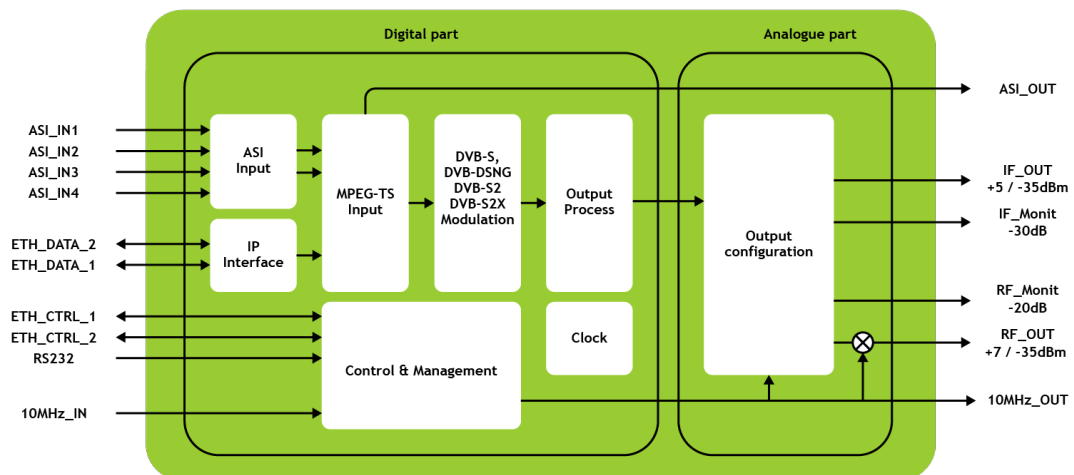
Vyper

Broadcast Satellite Modulator

Front



Back



Ordering codes

xSSR-VYP0-3001

S/SNG/S2/S2X Satellite modulator

- 1U Rack, 2 PSU
- 4 Eth ports, 4 ASI Inputs
- IF and RF outputs
- QPSK/64APSK, 80 Mbauds

xSSR-VYP0-3020

S/SNG/S2/S2X Satellite modulator

- 1U Rack, 2 PSU
- 4 Eth ports, 4 ASI Inputs
- IF and RF outputs
- QPSK/64APSK, 80 Mbauds
- BUC 48VDC

xSSR-VYP0-3010

S/SNG/S2/S2X Satellite modulator

- 1U Rack, 2 PSU
- 4 Eth ports, 4 ASI Inputs
- IF and RF outputs
- QPSK/64APSK, 80 Mbauds
- BUC 24VDC

Ordering options

xSSO-VYP0-BISE

BISS1-0/1/E Scrambling license - Software option

xSSO-VYP0-ESP0

Enhanced Satellite Precorrection Linear & Non-linear - Software option

xSSO-VYP0-S2XH

DVB-S2X - High efficiency constellations - Up to 256 APSK

xSSO-VYP0-BISA

BISS2-0/1/E/CA Scrambling license - Software option

xSSO-VYP0-LSNR

DVB-S2X - Very Low SNR Modes - BPSK/QPSK, Short/Normal/Medium