

# DualVyper

## Broadcast Satellite Modulator



Twin high quality satellite modulator in 1RU, Dual Vyper has been optimized for applications like DSNG truck, Flyaway systems or Teleport applications where density is a key point.

TeamCast Dual Vyper is a double satellite modulator designed for any MPEG-TS TV applications compliant to DVB-S, DVB-DSNG, DVB-S2 and DVB-S2X standards. Each modulator naturally comes with L-Band & IF interfaces as well as ASI & IP Inputs to match any system architectures. Managing symbol rate up to 80 MSymbol/s, TeamCast Dual Vyper can saturate two 72 MHz satellite transponders simultaneously.

### More Density

TeamCast Dual Vyper embeds two independent satellite modulators in one 1U rack chassis.

### All DVB Standards

Each Modulator performs high-quality modulation based on the DVB-S, DVB-DSNG, DVB-S2 and DVB-S2X standards, including constellation up to 256 APSK.

### Flexible Platform

TeamCast Dual 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 & Crystal Clear Spectrum

Based on the latest FPGA technology, TeamCast Dual Vyper provides Crystal Clear spectrum with very high SNR to improve your budget link and increase your bit rate.

## Applications

- DSNG – Contribution
- TV Distribution To Tower
- Single Illumination System
- DTH Broadcasting

## Other benefits

- Optimized CAPEX
- Space reduction
- Up to date and upgradable
- High RF Quality

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### Technical specifications

#### DATA I/O PER MODULATOR

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##### Ethernet Port

2 Ethernet ports 1 GigE - RJ45

##### ASI Interface

2 ASI Inputs - BNC - 75  $\Omega$

#### DATA PROCESSING PER MODULATOR

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##### 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

- BISS Version 1 Mode 0/1/E
- BISS Version 2 Mode 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 PER MODULATOR

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##### L-Band Main Output

- L-Band 950 MHz to 2150 MHz
- +7dBm to -35dBm / SMA 50  $\Omega$
- 10 MHz Reference insertion

##### L-Band Monitoring Output

- Copy of L-Band Main Output
- 20 dB Below / SMA 50  $\Omega$

##### IF-Band Main Output

- IF-Band 50 MHz to 180 MHz
- +5dBm to
- 35 dBm / BNC 75  $\Omega$

##### IF-Band Monitoring Output

- Image of IF signal @ 1.21 GHz
- -35 dBm / SMA 50  $\Omega$

#### CONTROL & MANAGEMENT

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##### Web UI

- HTML5 Technology
- Live statistics & monitoring

##### Front Panel

- One Easy to use front panel per modulator
- Full control & monitoring

##### SNMP

- SNMP v2 support
- TRAP & INFORM mechanism

##### Serial Link

- RS232 / DB9 connector
- Full control & monitoring

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## Broadcast Satellite Modulator



### PHYSICAL

#### Height x Width x Depth

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

#### Power Supply

2 x 90-240VAC

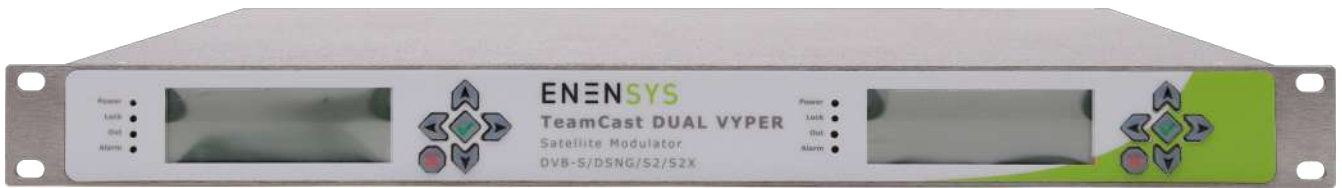
#### Format - Weight

1RU, 19" width - 6 kgs

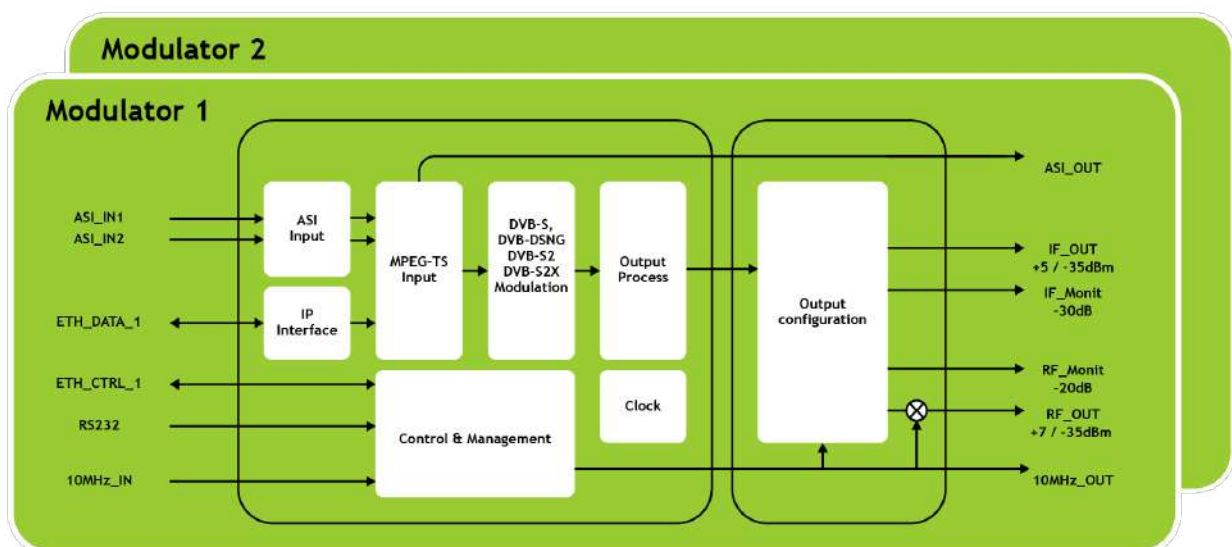
#### Power Consumption

2 x 30W

### Front



### Back



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## Broadcast Satellite Modulator



### Ordering codes

#### **xSSR-VYP0-2522**

DVB-S/DSNG/S2 DUAL Satellite Modulator - 50/180 & 950/2150 MHz Out, +7/-35 dBm - QPSK/64APSK - 80 Mbauds - 1U Rack

### Ordering options

#### **xSSO-VYP2-S2XH**

DVB-S2X standard - High efficiency constellations - Up to 256APSK - for DUAL modulator - Software option

#### **xSSO-VYP2-BISA**

BISS2 - mode 0/1/E/CA Scrambling license - for DUAL modulator - Software option

#### **xSSO-VYP2-BISE**

BISS1 - mode 0/1/E Scrambling license - for DUAL modulator - Software option

#### **xSSO-VYP2-ESP0**

Enhanced Satellite Precorrection Linear & Non-linear - for DUAL modulator - Software option