

## DVB-S/S2 MODULATOR-V.2.1



DVB-S/S2 Modulator v.2.1 is developed special for professional TV broadcasting. It supports **all modulations** (QPSK-32APSK) with **high MER** (more than 27 dB).

This type of modulator supports the DVB-S/S2 standard. DVB-S-S2 Modulator is controlled by our own developed VCC software by Ethernet. DVB-S/S2 Modulator has input BNC connector and can be produced with N-, F- or SMA-type of output connectors by order. The DVB-S-S2 Modulator is professional device and it is usually used by TV operators for modulation up to 32APSK.

### KEY FEATURES:

- supports symbol rate up to 45 Msymb/s
- output frequency range of 950-2150 MHz
- supports constellations of QPSK, 8PSK, 16APSK, 32APSK
- has high modulation error rate (MER)
- has output level up to 115 dBμV
- can be produced from 1 to 32 independent modulation channels
- optionally has 10 MHz reference and DC injection

### MAIN FUNCTIONS:

- remote control by Ethernet
- if power is lost all saved settings are recovered in the device after restoration of supply
- integrated over-voltage protection (by power supplying)
- integrated over-load protection (by power supplying)
- integrated short-circuit protection (by power supplying)

**[Video instructions about DVB-S/S2 Modulator v.2.1 watch here](#)**



Inputs	
Interface, connector type	ASI, BNC-type
Input bitrate, Mbit/s (max)	150
RF output:	
RF out (50 )	80-100 dB $\mu$ V
Number of inputs, connector type	RF output N-type (F or SMA as option)
Injection	Optionaly can provide injection of DC and 10 MHz reference
Modulation parameters DVB-S mode	
Constellation	QPSK
Modulation Error Rate (MER)	>27 dB
FEC	1/2 , 2/3 , 3/4 , 5/6 , 7/8
Symbolrate	1–45 MSymbol/s
Bandwidth	defined by symbolrate
Modulation parameters DVB-S2 mode:	
Constellation	QPSK / 8PSK / 16APSK / 32APSK
Modulation Error Rate (MER)	>27 dB
FEC (LDPC)	1/4 , 1/3 , 2/5 , 1/2 , 3/5 , 2/3 , 3/4 , 4/5 , 5/6 , 8/9 , 9/10

<b>Symbolrate</b>	<p>1 ... 45 MSymb/s (<u>8PSK</u>);</p> <p>1 ... 38.7 MSymb/s (<u>16PSK</u>, 1 channel mode),</p> <p>1 ... 43 MSymb/s (<u>16PSK</u>, 1 channel mode, <u>by request</u>);</p> <p>1 ... 31 MSymb/s (<u>32PSK</u>, 1 channel mode),</p> <p>1 ... 34.5 MSymb/s (<u>32PSK</u>, 1 channel mode, <u>by request</u>);</p> <p>in steps of 1 KSymb/s</p>
<b>Roll-Off-Factor</b>	0.2, 0.25, 0.35
<b>Pilots</b>	on/off
<b>Bandwidth</b>	defined by symbolrate
<b>Signals injection</b>	
<b>10 MHz reference</b>	$10^{-6}$ - $10^{-8}$ stability (optional)
<b>Power injection</b>	for the BUC 24V, 3A (optional)
<b>Adjustment</b>	
<b>Interface</b>	RJ-45, Ethernet
<b>Power Supply</b>	
<b>Input Voltage</b>	110-240 VAC, 50/60Hz
<b>Power Consumption</b>	6W per channel
<b>Environmental</b>	
<b>Operating Temperature</b>	0 to 45 (32 to 113 )
<b>Storage Temperature</b>	-20 to 80 (-4 to 176 )

<b>Operating Humidity</b>	90%, non-condensing
<b>Mechanical</b>	
<b>Dimensions (W x H x D)</b>	1RU: 483mm x 44.5mm x 450mm, 19'' x 1.73'' (1RU) x 17.7'' 2RU: 483mm x 89mm x 450mm, 19'' x 3.5'' (2RU) x 17.7''

*Taking into consideration that we (UMT LLC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.*

**Note!** *All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.*