

## **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)

Inputs		
Intreface, connector type	ASI, BNC-type	
Input bitrate, Mbit/s (max)	150	
RF output:		
RF out (50 )	80-100 dB <sub>µ</sub> 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	

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

Operating Humidity	90%, non-condensing	
Mechanical Mechanical		
Dimensions (W x H x D)	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.