UMT®

DVB-S-S2 REGENERATOR V2.0

DVB-S/S2 Regenerator — Multichannel Signal Recovery Device by UMT LLC

The **DVB Regenerator** by **UMT LLC** is a professional-grade multichannel device designed to restore and retransmit **noisy or weakened DVB-S/S2 signals**. Supporting up to **32 independent regeneration channels**, this unit ensures **clean signal recovery** and consistent output for **satellite TV broadcasting**, **MVDS**, and **headend systems**.

Controlled via Ethernet using **UMT's proprietary VCC software**, the regenerator is available with **F-type, N-type, or SMA connectors** to suit your setup. Designed for high reliability, it features **built-in protections** against overvoltage, overload, and short circuits. If power is lost, all settings are safely recovered on restart.

Inputs	
The input level	-65 … -25 dBm
RF Frequency range (DVB-S/S2)	950 MHz-2150 MHz in 1 kHz-steps
Interface, connector type	RF, N-type (F or SMA as option)

Symbol rate	1 … 45 MSymb/s (QPSK); 1 … 45 MSymb/s (8PSK); 1 … 38.7 MSymb/s (16PSK, 1 channel mode), 1 … 43 MSymb/s (16PSK, 1 channel mode, by request); 1 … 31 MSymb/s (32PSK, 1 channel mode), 1 … 34.5 MSymb/s (32PSK, 1 channel mode, by request); in steps of 1 KSymb/s

RF output

RF out (50)	80-100 dBµV
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
RF Frequency range (DVB-S/S2)	950 MHz-2150 MHz in 1 kHz-steps

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 or 32APSK (by request)
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	1 ... 45 MSymb/s (QPSK); 1 ... 45 MSymb/s (8PSK); 1 ... 38.7 MSymb/s (16PSK, 1 channel mode), 1 ... 43 MSymb/s (16PSK, 1 channel mode, by request); 1 ... 31 MSymb/s (32PSK, 1 channel mode), 1 ... 34.5 MSymb/s (32PSK, 1 channel mode, by request); in steps of 1 KSymb/s
Roll-Off-Factor	0.2, 0.25, 0.35
Pilots	on/off
Bandwidth	defined by symbolrate
Signals injection	
10 MHz reference	10^{-6}-10^{-8} stability (optionally)
Power injection	for the BUC 24V, 3A (optionally)
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	
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.*