

New Quad DVB-S2 transmodulators with double slot C.I. Flexmode and USB playing feature.

3DG-4S2-4T

3DGFLEX Evo



The new 3DGFlex Evo professional headend will introduce many innovative features.

Extreme flexibility!! One of the most innovative features of the new generation modules is the **"Smart & Pool"** function: all the new modules inserted on the same 3DGBOX exchange between them bidirectionally the contents through the very high speed Back Panel interface (up to 1Gbit/s bidirectional).

In this way each new 3DG "Evo" module is able to manage the signals coming from all the other new modules, with the advantage of being able to create flexible configurations, optimizing the number of elements of the system, especially in case of complex installations.

Also the **"backward compatibility"** concept is very advantageous: the new EVO modules can be managed on the same 3DG-BOX together with the "twin" existing modules (for ex. 3DG-2S2-2T), thus ensuring maximum comfort during the network design. In this way the installer could deploy many digital contents through every MATV coaxial network.

3DG-4S2-4T is possible to tune up to 4 independent satellite HD or SD transponders coming from the four inputs and even take the contents available on the Back Panel (i.e. "Smart&Pool feature"), decrypt the contents through the Professional CAMs and remodulate the programs on the four "customized" output digital multiplexes.

NEW FEATURES: thanks to the new FlexCAM operation mode feature, it's possible to decrypt many programs coming from the different SAT inputs, by using the same CAM module (i.e. Flexible CAM on the OUTPUT).

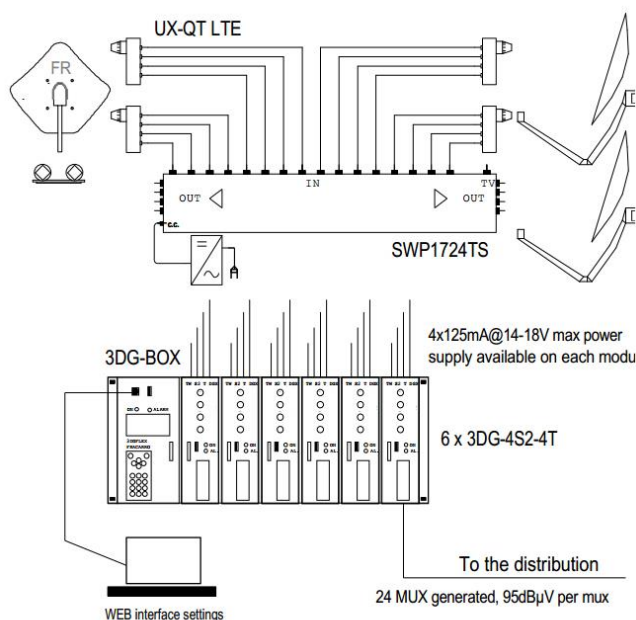
3DG-4S2-4T quad trasmodulator

Main Specifications

- **Multi Inputs:** 4 independent SAT inputs (DVBS2/S), “USB input” for external playback content management and Back-Panel in/out (programs shared between the new modules inserted on 3DG-BOX).
- **4xDVB-T or 4xDVB-C output multiplexes** (two pairs of adjacent digital modulators) on 3DG-4S2-4T version
- **2 Common Interface slots and Optimized CAMs Management:** the new 3DG-EVO modules allows to manage both CAMs modules in two different operation modes:
 - **FlexCAM mode:** it can be forwarded to the same CAM module the programs coming from any SAT input (i.e. Flexible CAM on the OUTPUT)
 - **STANDARD mode:** each CAM module can be associated with a SAT input SAT in order to decrypt the encoded programs coming only from this specific input.
- **New “Smart&Pool”** contents management feature: it’s possible to manage up to 1Gbit/sbidirectional data throughput between all the modules inserted into the headend. (3DGFlex evolution family)
- 3DGFlex-Evo backwards compatibility: in this way it’s possible to maintain the old modules or use the new modules into the same 3DG-Box
- **ARP 2.0** = Automatic Recovery Procedure to save the higher priority programs and guarantee Continuity of Service when bit rate overflows occur. All the program are sequentially restored when the global bit rate returns within the limits.
- **AUTO REMAPPING function:** you can change in real time the program inside the mux without rescanning all the TV set along the network.
- **USB Port** to upload/download pre-setted set up or for the firmware upgrade, external audio/video file’s playback (.TS file format).
- **DVB-T/DVB-C “agile output modulation” selectable via sw on 3DG-4S2-4T** transmodulator: one product to fit every coax network distribution.
- **WEB interface based headend: today is even more intuitive.** The headend setup, and configuration must be done by using the improved web interface built-in; basic setup available by on board keyboard.
- **“Mux-ad-Hoc”:** you can create the available muxes by choosing the programs tuned from all the new modules inserted on a same BOX and manage all the descriptor parameters of each mux (ONID, TSID, NetID,...) and each program inside the mux (LCN, SID, PID, Programname..).

PRODUCT		3DG-4S2-4T	
Fracarro code		283162	
Front-End			
N° input	N°	4	
Input frequency	MHz	950÷2150	
Input level	dBµV	50÷80	
Input step tuning	MHz	1	
LNB control		0/14/18VDC, 0/22KHz, DiSEqC 1.0	
Demodulation		DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	
FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	
Symbol rate	MS/s	2 ÷ 45 (DVB-S/ DVB-S2)	
AFC Range		-5 ÷ +5MHz	
Output Modulation			
N° of generated mux	N°	4 (two pairs of adjacent digital multiplexes)	
Transmission standard		DVB-T	DVB-C
Bandwidth	MHz	6, 7, 8	(depends on the output SR that was set)
Carriers		2k, 8k	-

PRODUCT PRODUCT		33DG-4S2-4T DG-4S2-4T	
Modulation		QPSK, 16-QAM, 64-QAM	16QAM, 32 QAM, 64QAM, 128QAM, 256QAM
Guard interval		1/4, 1/8, 1/16, 1/32	-
FEC		1/2, 2/3, 3/4, 5/6, 7/8	Reed Solomon (204, 188
Symbol Rate	MS/s		1000 to 6999
Spectrum		Normal/Inverted	
Operating Mode		Normal, Single Carrier	
RF Output			
Output frequency	MHz	111÷862	
Output channels		S2÷E69	
Output step tuning	KHz	250	
Typical RF output level	dBμV	95	
Output level adjustment	dB	0÷20	
Flatness	dB	± 1.5	
Typical Output MER	dB	36	
Spurious rejection	dBc	< -50	
Back Panel In/Out			
Max bitrate	Mbit/s	1000 (bidirectional)	1000 (bidirectional)
Connector		48 pin on back-panel	48 pin on back-panel
General features			
Power consumption	W	20 (typ. with CAMs)	
Connectors	Type	F female (RF), USB (fw upgrade, TS video file playback)	
Common Interface		2 x PCMCIA (Standard EN50221, TS10169) , FlexCAM or STANDARD mode	
Dimensions (L.x W.x H)	mm	245x208x54	
Operating temperature	°C	-5 ÷ +50 (without CAMs)	
Compliant		The full text of the EU declaration of conformity is available at the following internet address:	



The new 3DG-4S2-4T quad transmodulator can tune up to four different SAT transponders, decrypt the programs (through CAMs & Smart-Cards – NOT INCLUDED) and generate four separate full-band RF Digital Multiplex (DVB-T or DVB-C), 95dBμV each.

Remote supply for LNB is available on each module (max4x125mA@14-18V total). Back-panel content sharing between all the new modules contained inside the 3DG-Box

All settings can easily be made using the integrated WEB INTERFACE. Also the "backward compatibility" concept is very advantageous: the new EVO modules can be managed on the same 3DG-BOX together with the "twin" existing modules (for ex. 3DG-2S2-2T), thus ensuring maximum comfort during the network design. In this way the installer could deploy many digital contents through every MATV coaxial network.