

## Quad DVB-S2 CI – Twin DVBT/C with double slot C.I. “all in one” Compact Headend D-MATRIX-4S

# D-Matrix



The new D-Matrix compact headend range will introduce a revolutionary concept: a unique mechanics will be able to tune up to 4 satellite transponders, HD or SD, from 4 independent inputs, will decrypt the contents through Professional CAMs and will recreate up to 2 “customized” and independent COFDM or QAM multiplex.

Generating 2 DVB-T or DVB-C “ad-Hoc” muxes giving the installer the flexibility to choose the contents to be distributed.

Fully manageable parameters for both muxes and individual programs (LCN, SID, PDS, NIT, ...).

**New absolute feature:** USB Audio/Video file playback (TS file format).

### Main Specifications (\*)

- **Multi SAT Input:** 4 independent SAT input (DVB-S2), 2 independent DVB-T or DVB-C output mux, 2 Common Interface slots.
- **“Mux-ad-Hoc”:** you can create a mux with the chosen programs from up to 4 satellite transponders and manage all the descriptor parameters of each mux (ONID, TSID, NetID,...) and each program inside the mux (LCN, SID, PID, Program name..).
- **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.
- **WEB interface based headend:** setup, and configuration must be done by using web interface built-in; basic setup available by on board keyboard.
- **USB Port** to upload/download pre-setted set up or for the firmware upgrade, video playback (TS file format).
- **DVB-T/DVB-C “agile output modulation” selectable via sw:** one product to fit every coax network distribution.

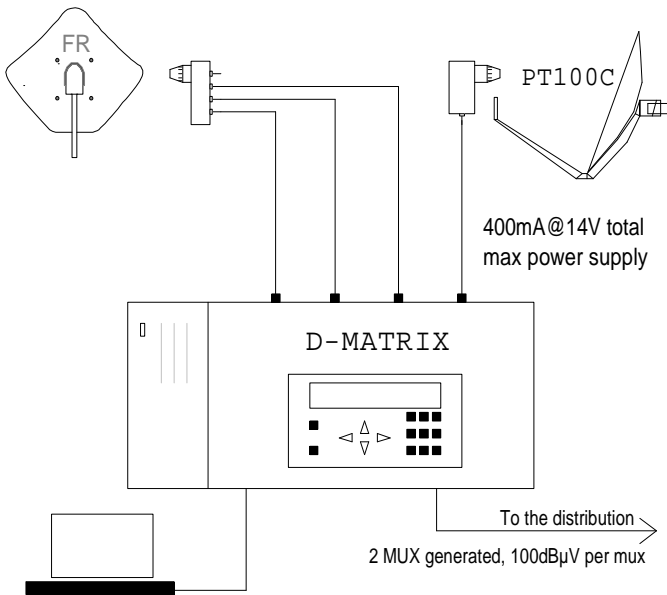
		D-Matrix-4S (*)	
Fracarro code		283131	
<b>Front-End</b>			
N° input	N°	4	
Input frequency	MHz	950÷2150	
Input level	dBµV	50÷80	
Input step tuning		1MHz	
LNB control		0/14/18VDC, 0/22KHz, DiSEqC 1.0	
Demodulation		DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	
FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	
Symbol rate	MS/sec	2 ÷ 45 (DVB-S/ DVB-S2)	
AFC Range		-5 ÷ +5MHz	
<b>Output Modulation</b>			
N° generated mux	N°	2	
Transmission standard		DVB-T	DVB-C
Bandwidth	MHz	6, 7, 8	(depends on the output SR that was set)
Carriers		2k, 8k	-
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	Msymb	-	1000 to 6999
Spectrum		Normal/Inverted	
Operating Mode		Normal, Single Carrier	
<b>RF Output</b>			
Output frequency	MHz	111÷862	
Output channels		S2÷E69	
Output step tuning	KHz	250	
Typical RF output level	dBµV	100	
Output level adjustment	dB	0÷20	
Flatness	dB	± 1.5	
Typical Output MER	dB	36	
Spurious rejection	dBc	< -50	

		General features (*)	
RF mix input	MHz	47÷862	
RF insertion loss	dB	2.5	
Mains Supply	Vac, Hz	184-264, 50/60	
Typical Power Consumption	W	42 (with two CAMs inserted)	
Connectors	Type	F female (RF), RJ45 (programming via web interface), USB (fw upgrade, <b>TS video file playback</b> )	
Common Interface		2 x PCMCIA (Standard EN50221, TS10169)	
Dimensions (L.x W.x H)	mm	360x230x54 (without CAM inserted) – 385x230x54 (with CAM inserted)	
Operating temperature	°C	-5 ÷ +55 (without CAM)	
Compliant		EN50083-2, EN60065	

(\*) Definitive specifications may change without notice.

## Installation Examples

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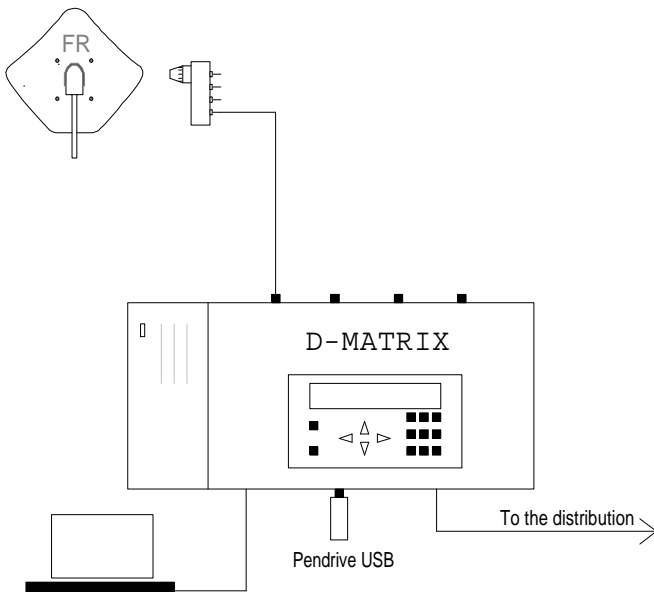


The D-MATRIX-4S headend can tune up to four different SAT trasponders, decrypt the programs (through CAMs & Smart-Cards – **NOT INCLUDED**) and generate two separate full-band RF Digital Multiplex (DVB-T or DVB-C), 100dBμV each.

Remote supply for LNB is available (max 400mA@14V total).

All settings can easily be made using the integrated WEB INTERFACE.

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The separate DVB-S2 inputs can be even set as a “RF loop” input during the programming procedure.

The USB pendrive can be use for:

- USB video file playback (TS file format only), for ex. INFOCHANNEL, etc.
- Firmware upgrade;
- Upload/download configuration.

