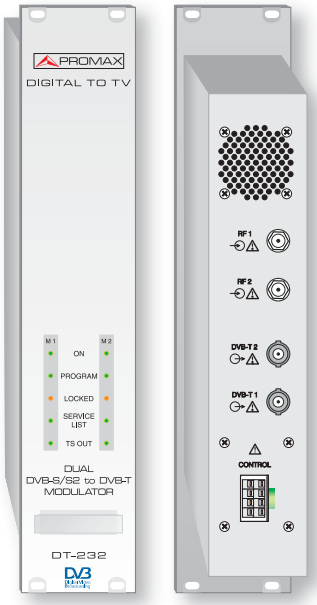
Dual DVB-S/S2 to DVB-T transmodulator with CAM



DT-232 modules are double transmodulators DVB-S/S2 (QPSK/8PSK) to DVB-T (COFDM). Its QPSK/8PSK inputs can be tuned to any satellite transponder, releasing the output at UHF band.

Its allows changing many parameters including the frequency and the level of the output signals.

The double transmodulator DVB-S/S2 to DVB-T (**DT-232**) includes an internal combiner providing a single DVB-T output with high C / N rate. This feature gives great robustness to the signal so it allows the addition of RF amplifiers in cascade when distributing with minimal loss of signal quality.

Each satellite receiver has an interface for Conditional Access Module (CAM). Different types of CAM can be used to decode one or more of the available encrypted programs and distribute them Free to Air (see **DT-902**).

Specifications	DT-232
DVB-S FI Input	
Type	2 DVB-S/S2 FI independent inputs
Connectors	75 Ω Type- F, Female
Frequency range	From 950 MHz to 2150 MHz
Input level	40 – 110 dBµV
Information	MER of the input signal
LNB Power supply	
Voltage	OFF, 13 V and 18 V (±1 V)
Current	< 400 mA
22 kHz signal	ON, OFF
Voltage	0.65 V ± 0.35 V
Frequency	22 kHz ± 4 kHz
DVB-S Parameters (input)	
Symbol Rate	2 – 45 Mbauds
Roll off	0.35
Code Rate	Automatic (1/2, 2/3, 3/4, 5/6 or 7/8)
Spectral Inversion	Automatic (ON, OFF)
DVB-S2 Receiver Parameters	
Constellation	QPSK, 8PSK (Auto)
Symbol Rate (QPSK)	2 – 45 Mbauds
Symbol Rate (8PSK)	2 – 45 Mbauds
Roll-off Factor	Automatic (0.20 , 0.25 and 0.35)
Code Rate (QPSK)	Automatic (1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10)
Code Rate (8PSK)	Automatic (3/5, 2/3, 3/4, 5/6, 8/9, 9/10)
Spectral Inversion	Automatic (ON, OFF)
DVB-T Parameters (Output)	
Carriers	2k / 8k
Constellation	QPSK, 16-QAM, 64-QAM
Channel bandwith	7 MHz, 8 MHz
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Spectral Inversion	ON, OFF

DT-232

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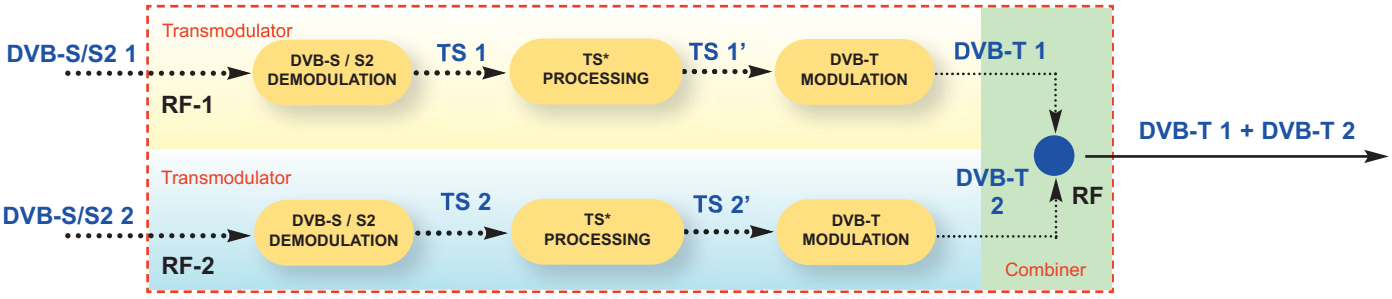
RF Output (DVB-T) Type Connector Frequency Range Power level (average) Frequency stability MER Phase noise SSB	2 DVB-T independent combined multiplexes BNC female connector, 50 Ω impedance From 474 to 875 MHz, in 1Hz step (see options for output in VHF band) Aprox. 85 dBµV without attenuation Variable attenuation from 0 to 30 dB (in 1 dB step) 10 ppm >36 dB from 650 MHz to 860 MHz >38 dB from 474 MHz to 650 MHz -87 dBc/Hz @ 2 kHz
Configuration	Through the **DT-800** Control Module in local (keypad) or remote mode (PC). See **DT-800.**
Transport Stream Processing *	Selection of Services by Name or streams filtering by PID (PID Filtering with Filtering Table up to 32 PID) Automatic Regeneration of PAT and SDT tables Adaptation of NIT table: - Editable NID (Network IDentifier) - Management for LCN (Logic Channel Number) Measures on TS: - Bitrate of the output multiplex - Percentage of bitrate used relative to the maximum capacity of the multiplex
Power supply Connector	Via the **DT-800** Control and Power module JST B08P-XL-HDS (Connecting Cable supplied with the **DT-800** module)
Operating environmental conditions Altitude Temperature range Max Relative humidity	Up to 2000 m from 5 °C to 40 °C 80% (up to 31 °C), decreasing lineally up to 50% to 40 °C
Mechanical features Dimensions Weight	50 mm (W.) x 262 mm (H.) x 230 mm (D.) 1.02 kg
Included accessories	BNC/BNC Cable 25 cm, BNC/BNC Cable 50 cm, User's Manual
Recommended accessories ** **DT-902**	CAM multiservice module for conditional access (maximum of 12 services) (Viaccess, Mediaguard, Irdeto, Conax, Betacrypt, Cryptoworks)
Options **DT-232-V** - Output Frequency	VHF option From 170 to 650 MHz
Minimal necessary configuration 1x **DT-800** 1x Mounting structure	Power and Control Module Rack and wall mounting structure (**DT-900**) or Rack mounting structure (**DT-900B**)

Functional scheme



* Available functions to process TS depend on the chosen combination of "Digital To TV" modules. For more details, see modules specifications.

** It is recommended to use the module CAM **DT-902** for other types of CAM.