Dual DVB-S to DVB-T Transmodulator

The **DT-202** modules are DVB-S (QPSK) to DVB-T (COFDM) transmodulators. They have direct QPSK input that can be tuned to any satellite transponder and output in the UHF band. They are agile in frequency and output level.

With our exclusive PID filtering function the user can remove video, audio or data services from the original transport stream. The system allows reducing bit rate of the incoming satellite transponders to values compatible with COFDM.

Modulation, Forward Error Correction or Guard Interval can be set to the desired values depending on the application. This allows packing more programs in a single COFDM channel than a standard off air DTT channel. A Typical configuration for a coaxial TV distribution system can be 64QAM, FEC=3/4 and GI=1/32 so that the modulator accepts the highest bit rate possible.

The dual DVB-S to DVB-T transmodulator (**DT-202**) includes an internal combiner that delivers a single DVB-T output with high C/N. This feature gives great robustness to the signal, allowing adding RF amplifiers in cascade during distribution with minimal loss of signal quality.

Especificaciones	DT-202
DVB-S FI Input	
Type	2 DVB-S 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-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
RF Output (DVB-T)	
Type	2 DVB-T independent combined multiplexes
Connector	BNC female connector, 50 Ω impedance
Frequency Range	From 474 to 875 MHz, in 1Hz step (see options for output in VHF band)
Power level (average)	Aprox. 85 dBµV without attenuation Variable attenuation from 0 to 30 dB (in 1 dB step)
Frequency stability	10 ppm
MER	>37 dB from 650 MHz to 860 MHz >39 dB from 474 MHz to 650 MHz
Phase noise SSB	-87 dBc/Hz @ 2 kHz

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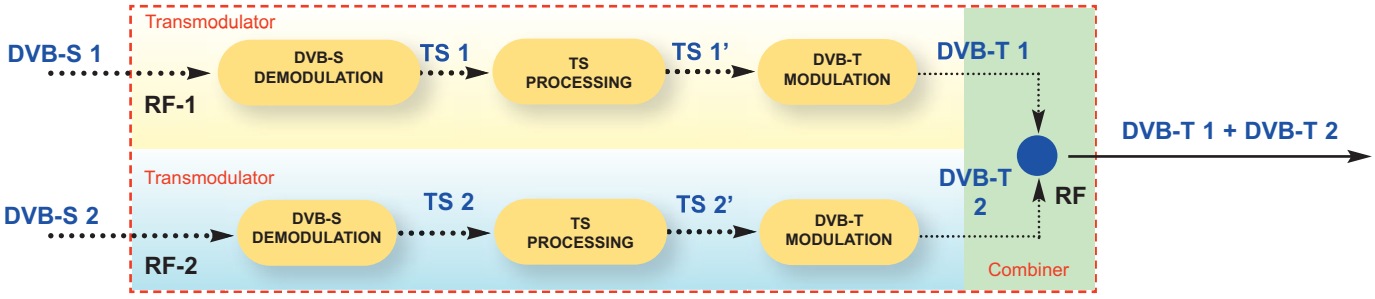
Configuration	Through the **DT-800** Control Module in local (keypad) or remote mode (PC) See **DT-800** specifications
Transport Stream Processing	Selection of Services by Name or streams filtering by PID (PID Filtering with Filtering Table up to 32 PID) Automatic Regeneration of PAT and SDT tables 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 Voltage and highest consumption	Via the **DT-800** Control and Power module JST B08P-XL-HDS (Connecting Cable supplied with the **DT-800** module) +12 V < 0.55 A + 5 V <1.4 A
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 1x 0 CC024 1x 0 CC027 1x-----	BNC/BNC Cable 25 cm BNC/BNC Cable 50 cm User's Manual
Options **DT-202-V** - Output Frequency	VHF option From 170 to 650 MHz
Minimal necessary configuration 1x **DT-800** 1x **DT-900**	Power and Control Module Sub-rack framework to install in a rack or on a wall

Functional scheme



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