

Single / Dual DVB-T Modulator



The **DT-101** (single) and **DT-102** (dual) modules are COFDM modulators compatible with DVB-T standard. They have TS-ASI input and RF output in the UHF band and are agile in frequency and output level. Inputs can contain services in all sorts of formats: SD, HD, MPEG-2, MPEG-4, etc.

With our exclusive PID filtering function the user can remove video, audio or data services from the original transport stream. In case of using the **DT-301** / **DT-302** as a receiver, the system allows to reduce bit rate of the incoming satellite transponders to values that can be used in 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 possible bit rate.

The dual DVB-T modulator (**DT-102**), 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.

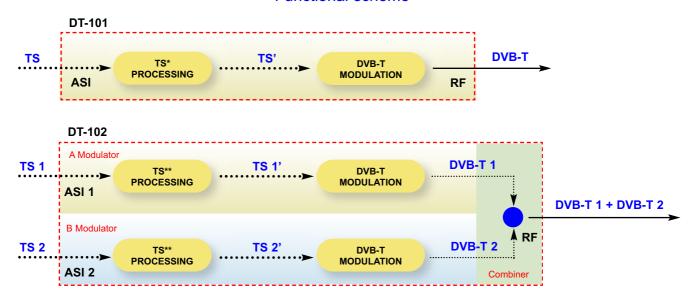
Specifications	DT-101/DT-102
TS Input Type Connector Packets	1 (DT-101) or 2 (DT-102) independent DVB-ASI inputs BNC female, Impedance 75 Ω TS of 188 or 204 bytes in length (automatic detection) Automatic adaptation to binary speed (removing NULL packets, Packet-stuffing and PCR-restamping)
DVB-T parameters (modulation) Carriers Constellation Channel Bandwith Guard Interval Code Rate Spectral Inversion	2 k , 8 k QPSK, 16-QAM, 64-QAM 7 MHz, 8 MHz 1/4, 1/8, 1/16, 1/32 1/2, 2/3, 3/4, 5/6, 7/8 ON, OFF
RF Output (DVB-T) Type Connector Frequency Range Power level (average) Frequency Stability MER Noise Phase SSB	1 DVB-T multiplex (DT-101) or 2 DVB-T independent combined multiplex (DT-102) BNC Female, Impedance 50 Ω From 474 to 875 MHz, in 1Hz step (see Options for output in VHF band) Aprox. 85 dB _μ V 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 at 2 kHz
Transport Stream Processing Basic Functions PID Filtering TS Measures Advanced Functions (Available only when it is connected to a DT-3XX receiver)	Filtering Table up to 32 PID Bitrate of the Output Multiplex Percentage of used bitrate (relative to the maximum capacity of the multiplex) Selection of Services by Name or streams filtering by PID Automatic Regeneration of PAT and SDT tables NIT table adaptation: - NID (Network Identifier) editable - Management of LCN (Logic Channel Number) for each module and service



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Configuration	Through the DT-800 Control Module in local (keypad) or remote mode (PC) (See DT-800 specifications)
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% at 40°C
Mechanical features Dimensions Weight	50 mm (W.) x 262 mm (H.) x 230 mm (D.) 1.53 kg
Included accesories 1x 0 CC024 1x 0 CC027 1x 0 MI1621	BNC/BNC Cable 25 cm BNC/BNC Cable 50 cm User's Manual
Minimal Configuration needed 1x DT-800 1x Mounting structure	Power and Control Module Rack and wall mounting structure (DT-900) or Rack mounting structure (DT-900B)
Options DT-102-V Output Frequency	VHF option From 170 to 650 MHz

Functional scheme



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