SERIES / MODEL	FAMILY	DESCRIPTION
TGT 100	ClassA. DVB-T to DVB-T Regenerator	Product designed to correct and rebuild a poor quality COFDM signal back to Quasi Transmis-sion Standard.

DVB-T input signal

Demodulation process

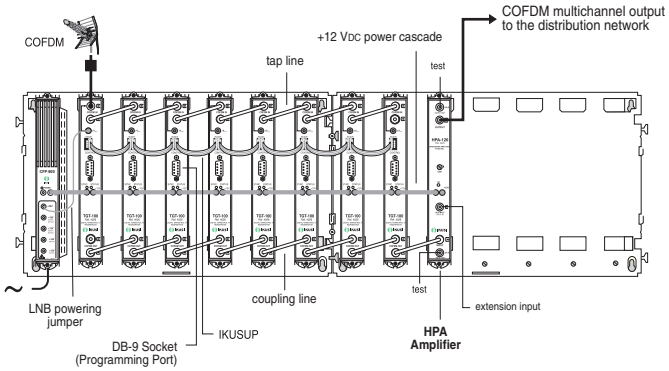
Errors correction

DVB-T demodulated output signal

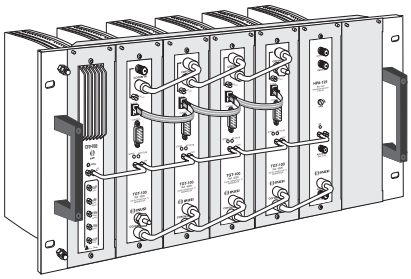
DVB-T

Made in Spain

Application examples



Example of TGT headend for 8 channels. Contains 8 regenerators TGT-100, 1 amplifier HPA and 1 power supply CFP-900, all fixed on 2 base-plates BAS-700.



Example of TGT headend in rack for 4 channels. Contains 4 regenerators TGT-100, 1 amplifier HPA and 1 power supply CFP-900, all fixed on rack SMR-601.

Main features

Model		**TGT-100**
Ref.		**4026**
Remote mode		Yes
Transport Stream Procesing (TS)		Yes
Input section (COFDM)		
Standard		EN 300 744
Input frequency band	MHz	174 – 230 and 470 – 862
Bandwidth	MHz	7, 8
Operating mode (auto. detection)		2K, 8K
Constellation (auto. detection)		QPSK, 16QAM, 64QAM
Hierarchy		High priority ; Low priority
Input level (64QAM and code rate 2/3)	dBµV	35 ... 100
Input loop-trhough gain	dB	0.5 (±1)
Guard interval (auto. detection)		1/4, 1/8, 1/16, 1/32
Re-modualtion section (COFDM)		
Data processing		2K, 4K (DVB-H), 8K
Constellations		QPSK, 16QAM, 64QAM
Code rate		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
In-depth interleaving (only on DVB-H)		Applicable (on 2K and 4K)
MER	dB	> 38 (typ.)
Output section (COFDM)		
Selectable output channel located between:	MHz	47 – 862
Bandwidth	MHz	5 (DVB-H), 6, 7, 8
Adjustable output level	dBµV	65 ... 80
Frequency stability	ppm	≤ ±10
Output loop-through loss	dB	1.1
Spurious in band	dBc	< -50
Broadband noise (ΔB=8MHz)	dBc	< -75

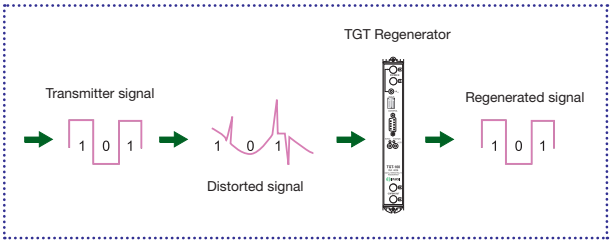
- A TGT module carries out the complete COFDM stream regeneration plus full processing from input to output:
- - tunes a COFDM digital channel in the range between 174-230 MHz or 470-862 MHz bands,

  - demodulates the received signal,

  - corrects errors within the actual COFDM data stream,

  - processes the transport stream, and

  - re-modulates an errorless data stream into an RF COFDM channel anywhere between 47-862 MHz.



		TGT-100
General		
Supply voltage	VDC	+12
Consumption	mA	670
Operating temperature	°C	0 ... +45
Input RF connector type		(2x) female F
Output RF connector type		(2x) female F
DC connector type		Banana socket
Programming interface		RS 232/DB-9
IKUSUP bus connector		(2x) 4 pin socket
Dimensions	mm	230 x 195 x 32

The module is packed with:
- 2 F plug bridges, 64 mm length, for input tap line and output coupling line.
- 1 DC plug bridge, 53 mm length, for connection of +12 VDC voltage.

TGT HEADEND

- The TGT is a COFDM to COFDM Transport Stream Regenerator/Processor. The product is designed to correct and rebuild a poor quality COFDM signal back to Quasi Transmission Standard. The product also allows the user to change various parameters of the regenerated COFDM stream at the output.
- A TGT headend includes:
  - As many TGT Regenerators as COFDM channels being received.
  - One or more AMX-400 combiners if the headend being assembled is extensive.
  - One HPA Amplifier to launch the combined output COFDM channels from the regenerators.
  - One or more CFP Power Supplies.
  - One or more Rack Frames or wall mounting Base Plates. The base plates can be joined horizontally.
  - Housing units for the base plates if required.
  - If the headend is large, one or more AMX-400 combiners.

The TGT headends deliver a multichannel COFDM signal with sufficient power to drive a distribution network.
An extension input at the HPA amplifier allows easy coupling of the wideband 47-862 MHz signal provided by other existing headend equipment.

FUNCTIONS OF THE TS PROCESSING

- Bit Rate adaptation with PCR restamping
- Adaptation of NIT table

  Adaptation to the particular adjustments of the headend is automatic. Name and identifier of the new network can be edited.
- Service and CA blockade

  Blockade is at service level and at conditional access level.

  Automatic regeneration of PAT, SDT and CAT tables.
- TS monitoring

  Usage level of the Transport Stream —percentage of null packets— is presented along the programming process.
- LCN insertion.
- TS_ID, SID, ONID and NID edition.

HEADQUARTER
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