

DTTCaster

Professional DVB-T/T2/ISDB-T/Tb demodulator



**The ENENSYS
DTTCaster is the
solution for network
broadcast operators
looking to reuse the
on-air DTT signal in
order to feed additional
transmitters sites.**

DTTCaster is ENENSYS' digital terrestrial TV rebroadcasting solution of DVB-T/T2/ISDB-T/Tb signals. It addresses DTT network operators and cable operators that need to reuse DTT services or to optimize their distribution network toward transmission sites.

High Density

The DTTCaster operates in the ENENSYS HDC chassis to embed up to 6x DTTCaster modules in 1U so that the same chassis can demodulate up to 24 frequencies in the same unit; each DTTCaster being able to demodulate 4 different frequencies from one RF input and output the incoming MPEG-2 TS over 4 ASI ports or the IP data ports of the chassis.

Multi Standards

The DTTCaster is a multi-standard DTT professional demodulator that supports DVB-T, DVB-T2 and ISDB-T/Tb standards. In DVB-T and DVB-T2, it will output a MPEG-2-TS over ASI and IP. In ISDB-T/Tb, the DTTCaster is able to output a TS at 32.5 Mb/s over ASI and IP including all the services of the layers available off-air. At the same time, it can receive DVB-T, DVB-T2 and ISDB-T/Tb signals and output the MPEG-2 TS over the 4 available ASI ports and both IP data ports of the chassis.

DVB-T2 SFN Rebroadcasting

The DVB-T2 standard mandates the use of the T2-MI (T2-Modulator Interface) protocol to enable the broadcasting of Multiple PLP over SFN networks. However, the T2-MI packets are removed by the DVB-T2 transmitters and not broadcast off-air. The DTTCaster can generate up to two deterministic T2-MI streams Multiple PLP from a DVB-T2 off-air signal based on the reception of T2-MIP packets to rebroadcast a DVB-T2 signal in Single PLP or Multiple PLP.

Applications

- DVB-T signal rebroadcasting
- DVB-T2 signal rebroadcasting
- ISDB-T/Tb signal rebroadcasting
- Cable networks rebroadcasting

Benefits

- Low CAPEX cost, managing 4 frequencies at once
- Embedded in High Density chassis (HDC): to allow up to 6x DTTCaster in 1U, to combine with ASIIPGuard, NetMod...
- Reduce CAPEX costs for DTT transmission sites by rebroadcasting signal from parent transmitter
- Optimize spectrum usage by enabling SFN rebroadcasting
- Enabling multiplex sharing in DVB-T2/MPLP

INPUT

Control	1x Gigabit Ethernet (RJ45) for GUI/SNMP
DVB-T DVB-T2 ISDB-T/Tb	1x RF input (F-type female - 50 Ω)
T2-MI	T2-MI input Over ASI (BNC) or IP

OUTPUT

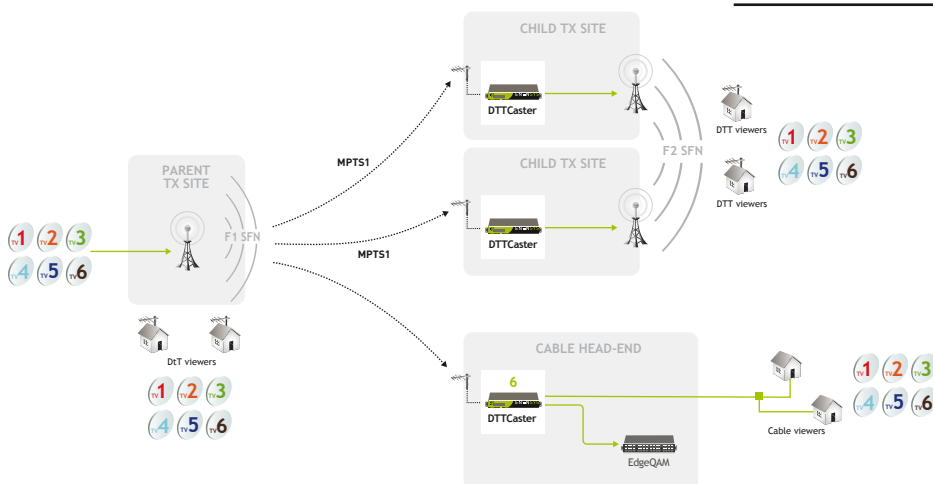
MPEG-2 TS	<ul style="list-style-type: none"> • 4x ASI (BNC) outputs • 2x Gigabit Ethernet (RJ45) for RTP/IP output streams
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PHYSICAL

Height	43 mm / 1.69 in.
Width	443,7 mm / 17.46 in.
Depth	322,8 mm / 12,70 in.
Format	1 RU, width 19"
Front Panel	LCD Display and controls
Power supply	100-240V 50/60Hz - 48V DC - <i>option</i>
Power consumption	25W/module

FEATURING

Multi-standard DTT demodulator - RF Band - RF Sensitivity	<ul style="list-style-type: none"> • DVB-T, DVB-T2, ISDB-T/Tb • Up to 4x frequencies at a time • UHF band IV-V and VHF Band III • -80 to -5 dBm
DVB-T demodulation	<ul style="list-style-type: none"> • Output MPEG-2 TS over ASI or IP • 6, 7, 8 MHz bandwidth • 2K and 8K FFT • QPSK, 16 QAM, 64 QAM constellation • 1/2, 2/3, 3/4, 5/6, 7/8 code rate
DVB-T2 demodulation	<ul style="list-style-type: none"> • Up to 2x T2-MI outputs over MPEG-2 • TS sent over ASI or IP • Single PLP and Multiple PLP support • Up to 4x PLP output at a time • T2-base and T2-lite support • V1.1.1, V1.2.1, V1.3.1 support • 1.7, 6,7,8 MHz bandwidth support
ISDB-T demodulation	<ul style="list-style-type: none"> • Output TS over ASI or IP • Multi-Layer support • 6, 8 MHz bandwidth
SFN/T2 rebroadcasting	<ul style="list-style-type: none"> • Deterministic T2-MI generation for SFN rebroadcasting - <i>option</i> • Single and Multiple PLP support
TS processing	<ul style="list-style-type: none"> • PID Filtering to remove services or components
IP management	<ul style="list-style-type: none"> • ProMPEG CoP#3/SMPTE 2022-1 • 2x Gigabit ports from the chassis
Monitoring and Supervision	<ul style="list-style-type: none"> • Easy-to-use web GUI • Full SNMP v2 support



ORDERING CODES

HDc-Multi-220V
HDc-Multi-48V

High Density chassis with 220V input
High Density chassis with 48V input

Chassis Options	HDcMulti-In220VRedundant HDcMulti-In48VRedundant	110V/220V redundant power supply 48V DC redundant power supply
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HDm-DTTCaster

DVB-T/T2/ISDB-T/Tb demodulator module with 1x RF input and 4 ASI outputs

Options	DTTCaster-T2MI DTTCaster-DualT2MI	Deterministic T2-MI output for DVB-T2/SFN rebroadcasting Dual T2-MI generation
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