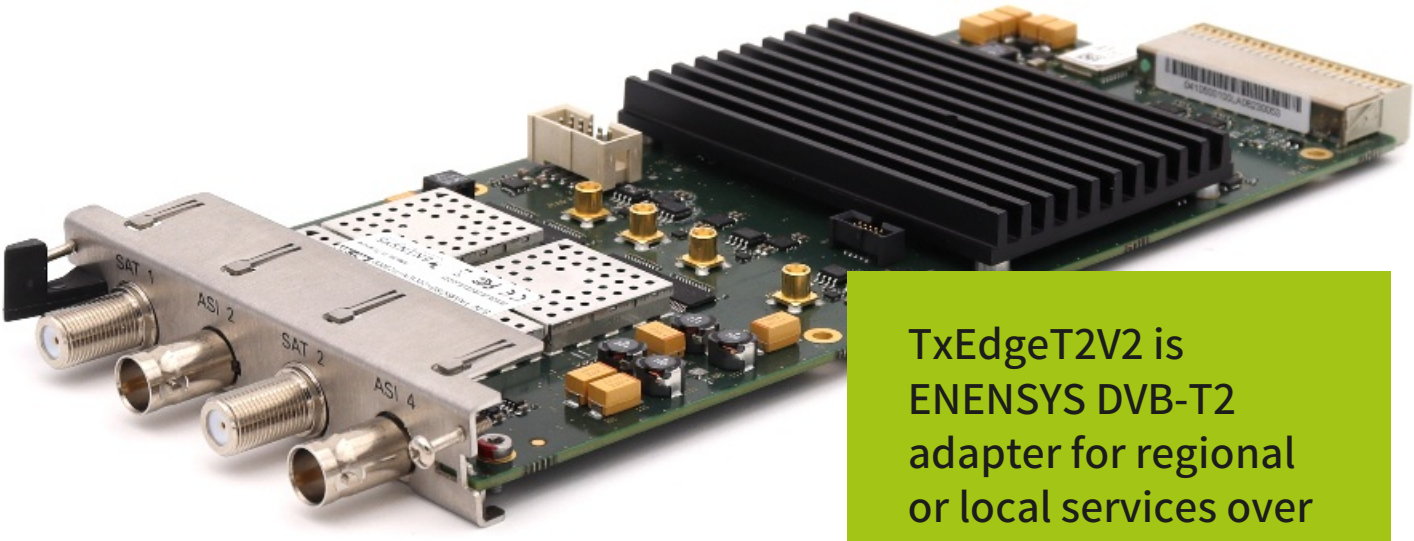
TxEdge T2V2

Local T2 Adapter



TxEdgeT2V2 is ENENSYS DVB-T2 adapter for regional or local services over SFN Networks.

TxEdge T2V2 is standard-based solution that enables the delivery of DVB-T2 regional or local services over SFN networks while saving operating OPEX by optimizing the distribution network bandwidth.

Deployed in the DVB-T2 world's largest roll-out

In 2011, MULTICHOICE, the leading multichannel digital television operator across the African continent, has selected the TxEdge for the deployment of the world's largest DVB-T2 network over Pan-African countries with a total bouquet of more than 50 different channels over 15 countries. Since then, it has been deployed by leading TV operators across Africa, Asia and Europe.

Regional content insertion using PLP substiution

The TxEdge is taking benefit from the multiple PLP technology to build the DVB-T2 regional multiplex at the DVB-T2 transmitter sites. Receiving national and regional T2MI streams composed of several PLPs, the TxEdge can substitute in the national T2-MI stream some PLPs from the regional PLPs to update with local content. The insertion is performed in a deterministic manner to enable SFN broadcasting

Regional content insertion using PLP aggregation

The PLP aggregation technology is an advanced and flexible regional content insertion solution that behaves as a PLP remultiplexer. It allows aggregating one or several PLPs between the national and regional T2-MI stream to build the regional multiplex.

Bandwidth optimization to reduce annual OPEX

The use of Multi-PLP architecture and PLP Substitution brings unmatched flexibility to the Network Operator and allowing a drastic reduction of the operational costs; all common TV content (national or international) being delivered only once to save the distribution network bandwidth.

Regional Emergency Warning Services (rEWS)

rEWS is a receiver-agnostic system providing video-based emergency warnings on a regional basis of dangerous weather events and natural disasters for DVB-T2 networks. It allows normal programming to be interrupted to play out the emergency alert, replacing all normal A/V transport stream components with the emergency content.

High Density chassis

The TxEdge can be embedded in the ENENSYS high density chassis to allow the generation of 6 different regional DTT multiplex. It can also be combined with ASIIPGuard or IPGuardV3 products

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Applications

- DVB-T2 regionalisation
- DVB-T2 ultra-local insertion
- Regional Emergency Warning Services (rEWS)

Other benefits

- Regional DVB-T2 multiplex creation at the DTT transmitter site using PLP substitution or PLP aggregation
- Deterministic PLP multiplexer to enable SFN broadcasting
- EWS solution interoperable with any receivers
- Unmatched DVB-SI processing to update service information related to the local services
- Statistical Multiplexing enabler for local content
- Transmitter agnostic
- Bypass mode to guarantee service availability in case of power outage
- Cost-effective solution by integrating DVB-S/S2/S2X satellite input

Technical specifications

INPUTS

Control
1x Gigabit Ethernet (RJ45)
for GUI/SNMP

T2-MI
2x ASI inputs (BNC)
1x Gigabit Ethernet (RJ45) - Option for T2-MI over IP input streams
Up to 2x DVB-S/S2/S2X inputs (F-type) with HDmIISat2-TxEdgeT2V2 (one active) - Option

OUTPUTS

T2-MI
2x mirrored ASI outputs (BNC)
1x Gigabit Ethernet (RJ45) - Option for T2-MI over IP output streams

Availability
Optional Bypass to always output incoming T2-MI over ASI

FEATURING

Standards
ETSI TS 102 773 V1.3.1
ETSI EN 302 755 V1.3.1

DVB-SI management
Update SI information to describe the new regional/local services
Update NIT, BAT, SDT, EIT tables

Local insertion
Insertion of regional or local services at PLP level using PLP substitution or PLP aggregation technology
Insertion of up to 3 different PLP
No duplication of national services
Jumbo T2MI (option) support to enable higher T2-MI bit rate

SFN compliant
Deterministic local TV insertion to enable SFN broadcasting
No external reference needed

EWS
Insertion of live EWS message instead of all A/V programs
Regional EWS insertion (rEWS)

Service availability
Bypass management to always deliver the main T2-MI stream in case of power failure
Service Filtering with Service Update option

Monitoring and Supervision
In-band configuration and firmware update support (Option)
Easy-to-use web based GUI
User management
Full SNMPv2 support

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PHYSICAL

HDc

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 or 48V DC

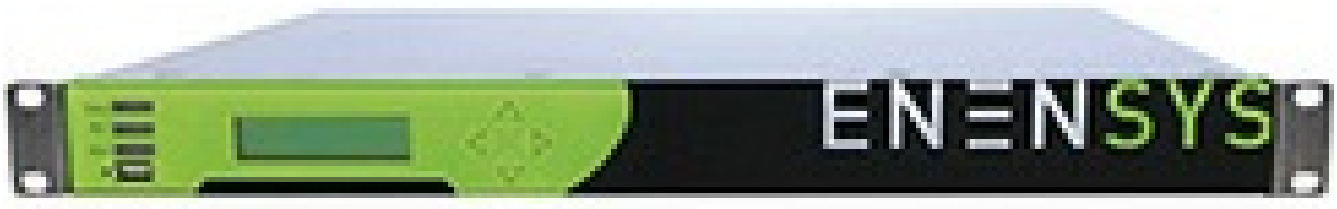
Control IP Port
1x Gigabit Ethernet (RJ45) control port

Data IP Ports
2x Gigabit Ethernet (RJ45) data port

Power consumption
24W/module

Operating temperature
0 to 50°C / 0 to 122°F with 3 modules - 0 to 45°C / 0 to 113°F with 6 modules

Front



Back

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Ordering codes

HDc-220VRedundant
High Density chassis with 2x 220V AC Power supplies

HDc-48VRedundant
High Density chassis with 2x 48V AC Power supplies

HDmII-TxEdge-T2
DVB-T2 local adapter with PLP substitution with 2x ASI in and 2x ASI out

HDmIISat-TxEdge-T2
DVB-T2 local adapter with PLP substitution with 2x ASI in and 2x ASI out and 2x DVB-S/S2 satellite inputs (Up to 32 APSK) - one active

Ordering options

TxEdgeT2V2-Bypass (hardware)
Bypass to always output main input

TxEdgeT2V2-OptiPLP
Insertion with PLP aggregation

TxEdgeT2V2-SIUpdate
Update SI information to match with new services

TxEdgeT2V2-EWS
Regional EWS solution management to alert for immediate dangers

TxEdgeT2V2-BISS
Allows BISS-1 descrambling

TxEdgeT2V2-ServiceUpdate
Output a part of the incoming services

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