SmartGate T2MIGen

T2-MI Generation for local head-end

TERRESTRIAL MARKET

SmartGate T2MIGen is ENENSYS' T2-MI generator for local head-end managing tv services.

SmartGate T2MIGen is designed to encapsulate into a T2-MI stream one or two TS stemming from a multiplexer or directly from encoders. It outputs the resulting T2-base or T2-lite compliant multiplex through ASI and IP.

Local T2-MI Generator

The SmartGate T2MIGen is a cost-effective solution to address the delivery of regional or local TV services from ad-hoc head-ends with limited number of TV services. It perfectly fits into the ENENSYS DVB-T2 regionalization solution: at the transmission site, the TxEdge-T2 receives one national T2-MI stream and one regional T2-MI stream to build a regional DVB-T2 multiplex mixing national and regional TV services; the SmartGate T2MIGen generating the regional T2-MI stream whilst the standard DVB-T2 Gateway delivering the national T2-MI stream from the central head-end.

Single PLP our Multiple PLP capable

SmartGate T2MIGen can encapsulate 1 or 2 TS into 1 or 2 PLP. It supports all the DVB-T2 transmission modes and generates T2 timestamp to enable SFN broadcasting over DVB-T2. It can provide built-in GPS/GLONASS reception to avoid using external GPS/GLONASS receiver. The SmartGate T2MIGen offers DVB-ASI inputs and outputs interfaces by default, IP input and output as an option.

T2-Lite and FEF for Mobile Broadcasting

The SmartGate T2MIGen can also address mobile broadcasting using T2-lite technology. It generates a T2-MI stream for a standalone T2-lite signal with one or two PLPs. It can also declare Future Extension Frame (FEF) to enable the broadcasting of T2-lite signal with T2-base signal in the same RF channel, where each T2 signal has the others in its FEF parts.

Applications

• DVB-T2 Regionalisation
• DVB-T2 SFN/MISO build-up
• DVB-T2 Mobile broadcasting

Benefits

• Cost effective solution
• Implemented in High Density chassis (HDc):
  - to allow multiple T2-MIGen in 1U
  - to combine with ASIIPGuard for redundancy
  - with hot swappable features
• Quick handling of the DVB-T2 complexity
• Interoperability proven with transmitters
• T2-lite broadcasting for mobile reception
• Straight integration into any NMS

ENENSYS Technologies

www.enensys.com

SmartGate T2MIGen

INPUT

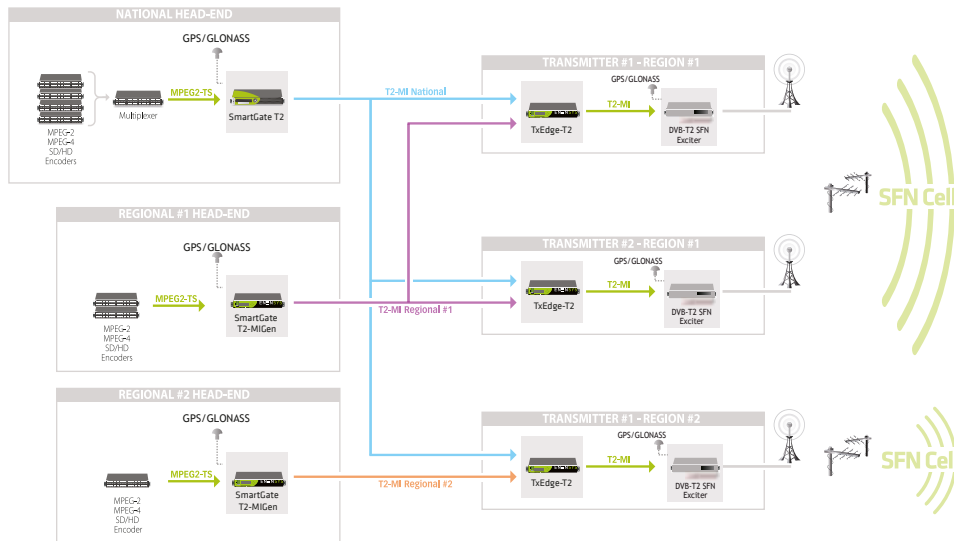|	
Control	1x Gigabit Ethernet (RJ45) for GUI/SNMP
MPEG-2 TS	• 2x ASI (BNC) inputs • 1x Gigabit Ethernet (RJ45) for UDP/IP input streams
GPS/GLONASS	• 1x PPS and 1x 10Mhz inputs • 1x TNC for internal GPS/GLONASS

OUTPUT

T2-MI/MPEG-2 TS	• 2x mirrored ASI (BNC) outputs • 1x Gigabit Ethernet for RTP/UDP/IP output streams

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 - *Option*
Power consumption	25W/module

FEATURING

DVB-T2 standard	V1.1.1, V1.2.1, V1.3.1 support T2-base or T2-lite broadcasting
DVB-T2 encapsulation	Encapsulation into BB frames Full support of BB frame modes
SFN Adaptation	T2 Timestamp generation MISO Support
PLP management	1 or 2 PLP support Type1 and type2 management Static PLP allocation ISSY generation
FEF	FEF declaration as an option Enabling composite RF signal
T2-MI output	Generation of T2-MI packets 30Mb/s as maximum bit rate IP output featuring Pro MPEG CoP#3 FEC generation
Monitoring and Supervision	ProMPEG CoP#3/SMPTE 2022-1 2x Gigabit ports from the chassis

ORDERING CODES

HDc-Multi-220V	**High Density chassis with 220V input**
HDc-Multi-48V	**High Density chassis with 48V input**

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

HDm-SmartGate-T2MIGen	**T2-MI Generator with 2x ASI inputs and 2x ASI outputs**

Options	SmartGate-T2MIGen-Multi-PLP-2	Management of up to 2 PLP (use 2x Gigabit Ethernet data ports of the chassis)
	SmartGate-T2MIGen-IP	IP input/output management
	SmartGate-T2MIGen-FEF	FEF generation
	SmartGate-T2MIGen-T2Lite	T2-lite support
	SmartGate-T2MIGen-AdvMonitoring	Enabling PLP monitoring T2 parameters
	NN6-GPSv2	Built-in GPS/GLONASS receiver

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RoHS

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