

NN6-MIP DVB

MIP inserter - Single Frequency Network Adapter

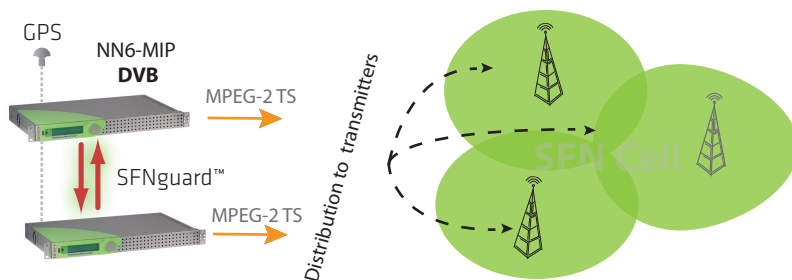


NN6-MIP DVB provides a cost effective and highly reliable solution for setting up Single Frequency Network (SFN).

Frequency allocation is one of the main issue broadcasters and Network Operators have to face. NN6-MIP DVB enables spectrum band optimization by synchronizing the transmission of any transmitter within one SFN cell.

Besides MIP insertion, NN6-MIP DVB possibilities are further enhanced thanks to the full implementation of DVB optional functions: any transmitter can be addressed individually, enabling time offset, and/or frequency offset ... thus refining RF coverage.

A single de-synchronization or wrong SFN signaling can disturb transmission and cause a complete black-out. To prevent any SFN error, NN6-MIP DVB provides 1+1 redundancy mechanism through its patented technology SFNguard and enables SFN seamless switch-over.



Applications

- SFN network build up
- SFN DVB-T Broadcast
- SFN DVB-H Mobile Tv Broadcast
- SFN DVB-T/H Hierarchical broadcasting

Benefits

- Spectrum bandwidth optimization
- RF coverage refinement by addressing each transmitter individually
- High grade SFN Adapter
- Unique redundant solution
- Easy integration into NMS

Characteristics

- 2 ASI inputs
- 2 mirrored ASI outputs
- 10 MHz input
- 1PPS input
- RF GPS antenna input (option)
- 32 Mbps throughput
- 2x Fast Ethernet ports
- SNMP Agent
- Web Server embedded
- Real-time monitoring
- Fault relay alarm
- 1+1 redundancy (SFNguard option)

Options

- Internal NN6-GPS receiver
- SFNguard 1+1 redundancy mechanism
- DTMB (DMB-T) support (multistandard)

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Input Interface

| | |
|-----------------|--|
| MPEG2-TS | 2xASI software selectable 1+1 ASI redundancy BNC (75 Ω) |
| Clock Reference | 10MHz and 1PPS inputs Configurable internal 10MHz and 1PPS automatic switching upon external reference loss |
| Control | 10/100 Base-T for standard web based interface. |

Output Interface

| | |
|-----------------|---|
| MPEG2-TS | Bit Rate: 0-32 Mbps framing: 188/204 (RS coding) |
| TS substitution | Null and MIP packets insertion upon input sync loss (configurable) |
| Output mute | Configurable output mute upon 10 MHz loss and/or input sync loss |

Processing

| | |
|---------------|---|
| Configuration | MegaFrame Initialization Packet according to TS 101 191. All DVB modes supported Hierarchical mode support NIT update All optional functions: up to 128 transmitters at the same time |
| Input data | PCR restamping + bitrate adaptation |
| Redundancy | Redundant ASI inputs Mirrored ASI outputs 1+1 seamless switch-over |
| Supervision | Full SNMP v2 support Easy integration into NMS |
| Option | SFNguard 1+1 seamless redundancy Integrated NN6-GPS receiver DTMB (DMB-T) support |

Alarms

| | |
|---------|---|
| Sources | ASI Sync missing MPEG2-TS sync missing 10MHz / 1PPS loss No PCR / NIT detected System T° / Overflow System Clock loss / internal error GPS signal Loss (option) |
| SNMP | Any alarm can be configured as a trap and/or trigger relay out |

Environment

| | |
|-----------------------|-------------------------------|
| Operating temperature | 0 to 50°C / 0 to 122 °F |
| Storage temperature | -20°C to 70°C / -4°F to 158°F |
| Humidity | 0 to 95%, non condensing |

Physical

| | |
|-------------------|--------------------|
| Height | 43 mm / 1.7 in. |
| Width | 440 mm / 17.4 in. |
| Depth | 274 mm / 10.79 in. |
| Format | 1 RU, width 19" |
| Power supply | 100-240VAC |
| Power consumption | 8W |



ENENSYS Technologies
Le Germanium
80 avenue des Buttes de Coesmes
35700 Rennes
FRANCE
Office (+33) 1 70 72 51 70
Fax (+33) 2 99 36 03 84
contact@enensys.com