

# NN6-MIP DVB

## MIP inserter - Single Frequency Network Adapter

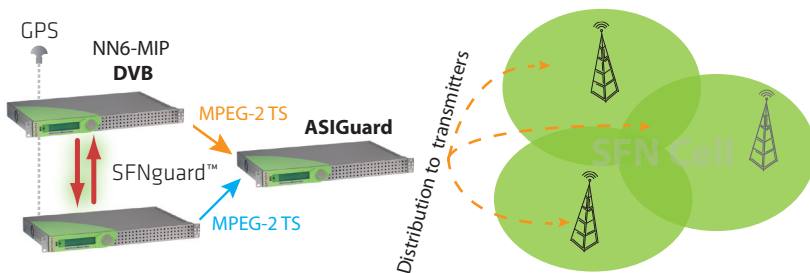


### NN6-MIP DVB provides a cost effective and highly reliable solution for setting up Single Frequency Network (SFN).

Frequency allocation is one of the main issue broadcasters and network operators have to face. **NN6-MIP DVB** enables spectrum bandwidth 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.

In **Single Frequency Networks**, a single de-synchronization or wrong SFN signaling can disturb transmission and cause a complete TV black-out. To prevent any SFN error, **NN6-MIP DVB** provides 1+1 redundancy mechanism through its patented technology **SFNguard**. Combined with **ASIGuard**, ENENSYS solution enables a unique and secured SFN seamless switch-over in case of input failure, GPS or unit failure.



### 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
- High grade SFN Adapter
- Proven interoperability with SFN transmitters
- Avoid TV blackout during switch-over
- Easy integration into any NMS

### Characteristics

- 2 redundant ASI inputs
- 2 mirrored ASI outputs
- MIP packet insertion
- PCR restamping
- NIT update
- TPS signalling for DVB-H transmission
- Optional parameters management
- Several redundancy levels
- 1+1 seamless redundancy (SFNguard option)
- Real-time monitoring of incoming streams
- Easy to use web-based GUI
- Full SNMP v2 support

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### Input Interface

MPEG2-TS	2xASI software selectable 1+1 ASI redundancy BNC (75 Ω)
Clock Reference	10MHz and 1PPS inputs Optional GPS input
Control	10/100 Base-T for standard web based interface.

### Output Interface

MPEG2-TS	Mirrored ASI output (75 Ω) 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

### Features

Processing	MegaFrame Initialization Packet insertion 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	Easy to use web-based GUI Full SNMP v2 support Easy integration into any NMS

### 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

### Physical

Height	44 mm / 1.7 in.
Width	440 mm / 17.48 in.
Depth	274 mm / 10.79 in.
Format	1 RU, width 19"
Power supply	100-240VAC
Power consumption	8W



### Ordering

<b>NN6-MIP DVB</b>	SFN Adapter/MIP inserter
<b>Options</b>	Built-in GPS receiver
• NN6-GPS-MIP	DTMB support (multistandard)
• NN6-MIP-MULTI	1+1 seamless redundancy
• NN6-SFNguard	



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