

ASIGuard II

Seamless ASI switch

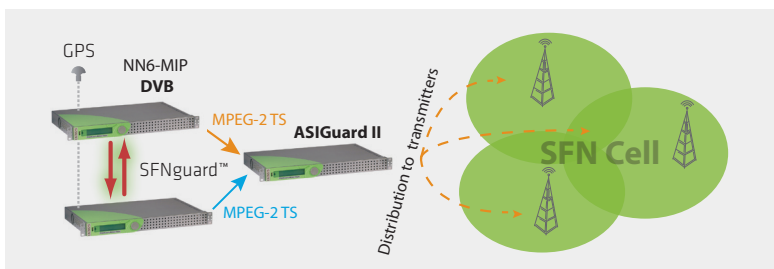


ASIGuard II is ENENSYS cost-effective ASI seamless switch that enables 1+1 automatic redundancy mechanism of ASI equipments

ASIGuard II performs an automatic change-over between two MPEG-2 Transport Streams according to the validity of the incoming streams. Upon ETR290 errors or ASI signal problems, **ASIGuard II** switches automatically from the faulty input to the valid input. It includes optionally a second ASI switch function within the same unit to enable a seamless change-over between an additional peer of MPEG-2 TS.

The **ASIGuard II** strives to provide a true seamless switch-over under the following conditions :

1 In **DVB-T Single Frequency Networks**, the **ASIGuard II** enables a unique, automatic and secured SFN seamless change-over between two ENENSYS SFN Adapter, **NN6-MIP DVB**, with the patented technology **SFNguard™**. This is mandatory to guarantee a SFN broadcasting, where all DVB-T SFN transmitters must receive the same content to transmit it over the same frequency at the very same time.



2 In **DVB-T2**, the **ASIGuard II** can seamlessly switch-over redundant T2-MI streams. It can provide an automatic 1+1 redundancy mechanism between two DVB-T2 Gateways. Combined with the ENENSYS DVB-T2 Gateway, **NN6-T2 Gateway**, and the patented technology **T2Guard™**, the **ASIGuard II** offers a safe and seamless redundancy solution for SFN and MFN DVB-T2 broadcasting.

3 Distribution or contribution of MPEG-2 TS signals can be delivered through redundant links. Both links may have different delays (satellite/IP, IP/IP with different network paths). **ASIGuard II** enables to realign both streams to seamlessly and automatically switch-over one link to another link. Thus, changing-over one network to another network as no effect on the audiovisual content carried over MPEG-2 TS. This applies also for T2-MI streams carried over different network paths.

Applications

• **1+1 automatic changeover** for:

- DVB standards (DVB-T/T2/H/S/C)
- DTMB standard
- ISDB standards
- ATSC/ATSC-MH standards

• **TS seamless switch-over**

- SFN seamless switching
- Alignment of 2 identical MPEG-2 TS but delayed in a MFN environment

• **DVB-T2 seamless switch-over**

- Seamless 1+1 redundancy of T2Gateways with **T2Guard** patent technology
- Alignment of 2 identical T2-MI/MPEG-2 TS with delayed in a MFN or SFN environment

Benefits

- Avoid TV black-out in SFN (and MFN in DVB-T2)
- Seamless switch-over with delayed source
- Multi-standard applicable (DVB,ATSC,ISDB,DTMB)
- **Video agnostic** : MPEG-2 or MPEG-4/H.264
- Flexible dual switch offering (enabling T/T2 mix)
- Maintain service continuity
- High-grade broadcast product
- Easy integration into any NMS

Characteristics

- Automatic switch between 2 MPEG-2 TS
- Automatic switch between 2 T2-MI streams
- Up to 2 seamless switch function in the same unit
- 1+1 redundancy for Head-end components
- Several switching modes
- Flexible switching condition configuration
- ETR290 based switching conditions
- Passive and Advanced Passthru mechanisms
- Real-time monitoring of incoming streams
- Easy to use web-based GUI
- Full SNMP v2 support

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Seamless ASI switch

Input Interface

MPEG2-TS 2x ASI inputs by default
 2x ASI additional inputs with
 dual switch option

Control 10/100 Base-T for standard web
 based interface

Output Interface

MPEG2-TS 2x Mirrored ASI outputs by default
 2x additional mirrored ASI outputs
 with dual switch option
 Packet/Burst mode

Availability Basic passthru replicating the inputs
 Advanced passthru maintaining the
 last selected switch

Monitoring 1xASI output to monitor incoming TS

Processing

Inputs Realign the stream stemming from
 resynchronization different network with different
 delays to output one single MPEG-2 TS

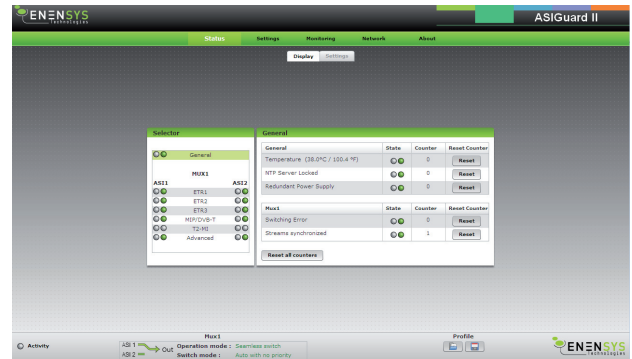
SFN preservation Enables seamless switch in case one
 distribution fails while maintaining
 SFN synchronization

Switching modes Automatic switch from one input to the
 other one upon failure
 Automatic switch with input priority
 Manual switch

Switching conditions ASI sync loss
 ETR290 and new T2-MI alarms
 Video and audio minimum bit rate
 GPI input

Monitoring Real-time monitoring of incoming
 streams, Web-based GUI

Supervision Full SNMP v2 support
 Easy integration into NMS
 Dry relay output



Physical

Height 44 mm / 1.7 in.
 Width 444 mm / 17.48 in.
 Depth 274 mm / 10.79 in.
 Format 1 RU, width 19"

Power supply 100-240VAC
 48V DC (option)

Power consumption 20W



ASIGuardII with dual switch and dual power options

Ordering

ASIGuard II Seamless ASI switch

Options

- Seamless TS MFN and SFN seamless TS switch
- Seamless T2-MI T2-MI MFN and SFN seamless switch
- Dual Switch Additional seamless switch function
- NN6-DualPower Redundant power supply
- NN6-48VIn 48V DC input



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