



GigaCaster II TS over IP Gateway



GigaCaster II TS over IP gateways provide a versatile, efficient and reliable solution for delivering digital TV content over IP networks.

ENENSYS' TS over IP gateway is suitable for delivering over IP networks any MPEG content from one point to another point (**contribution**) or from one point to multi-point (**distribution**).

GigaCaster II high density TSolP gateways can handle the carriage of up to 8 MPEG-2 Transport Streams (MPEG-2 TS) in ASI to IP direction or in IP to ASI direction. Each MPEG-2 TS can include either MPEG-2 or MPEG-4 (H264) video content in SD or HD format.

The **GigaCaster II** is the most efficient TSolP Gateway to cope with all IP network drawbacks: removing IP network jittering, recovering IP packet loss using FEC ProMPEG CoP#3, substituting bursty packet loss with NULL packets while maintaining an accurate and constant output bit rate and re-ordering IP datagrams.

When broadcasting over Single Frequency Network, the **GigaCasterII** implements a patented technology that guarantees a reliable SFN broadcasting with or without external 10MHz reference. It offers various redundancy mechanisms at unit level (**DistriGuard**) and stream level (**Dual IP**) to ensure a safe IP delivery.

Applications

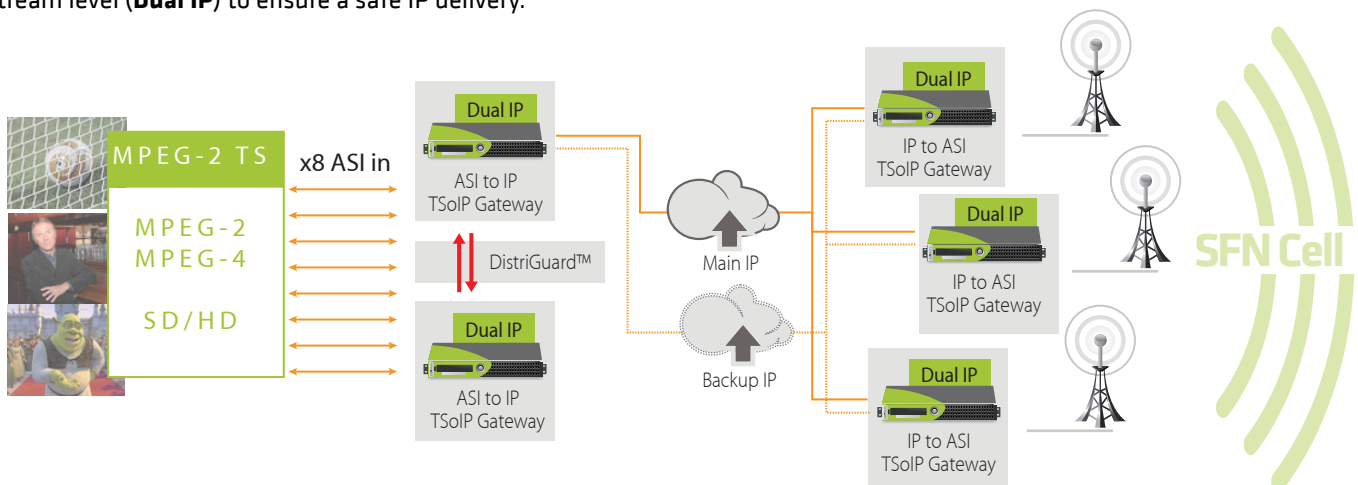
- **Contribution:** point-to-point video delivery
- **Distribution:**
 - DTT Transmission sites interconnections
 - Reliable SFN broadcasting over IP
 - Radio Link sites interconnections
- **ASI to IP** converter and **IP to ASI** converter

Benefits

- **Versatile** : ASI>IP or IP>ASI per TS
- **Multi-standard**: ATSC, DVB-T/H, ISDB-T
- **Video agnostic**: MPEG-2 or MPEG-4/H.264
- **Scalable** : From 1 TS up to 8 TS
- Unique patented **SFN preservation**
- **Reliable** : Redundancy at stream and unit level

Characteristics

- Up to 8 DVB-ASI ports
- 1+1 unit redundancy with DistriGuard option
- RTP / UDP support
- Unicast, Multi-Unicast and Multicast support
- Bidirectional ASI or IP delivery in the same unit
- 1+1 stream redundancy with Dual IP option
- Pro MPEG Forum CoP#3 / SMPTE 2022
- Burst of packet loss recovery mechanism
- Network jitter removal
- Real-time monitoring
- Full SNMP v2 support





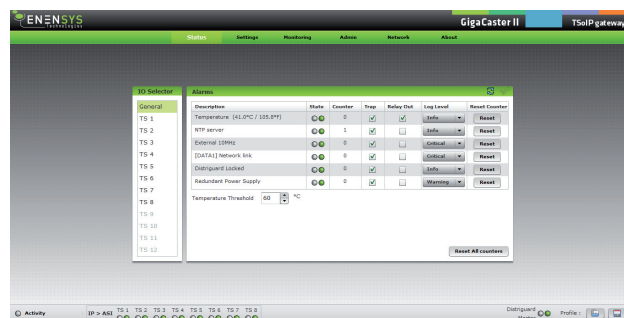
GigaCaster II TS over IP Gateway

Inputs/Outputs

Control	2x Gigabit Ethernet for GUI/SNMP
ASI	MPEG-2 Transport Stream over ASI Up to 8 bidirectional DVB-ASI (BNC 75Ω) Up to 100 Mb/s per TS Up to 400 Mb/s over all TS with FEC
IP	MPEG-2 Transport Stream over IP 1+1 redundant Gigabit Ethernet (RJ 45) 1+1 redundant SFP port 600 Mb/s maximum throughput RTP or UDP datagrams
GPS	1x 10 Mhz input for accurate bit rate

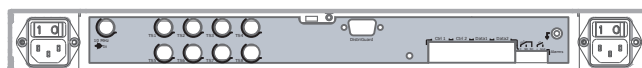
Featuring

IP encapsulation	DVB-IPI - SMPTE 2022 compliant From 1 to 7 TS packets/IP packet
IP management	Unicast, Multi-Unicast and Multicast VLANs Management IGMP v2/V3 support
Packet loss recovery	Packet Loss correction based on: - FEC Pro MPEG CoP#3 - RTP recovery for bursty loss
Jitter removal	Configurable buffer (10 - 900ms) to absorb network jittering
Single Frequency Network	Accurate bit rate adaptation with or without 10MHz external input
Redundancy	1+1 unit redundancy (DistriGuard option) 1+1 streams redundancy (DualIP option)
Control and Supervision	Easy-to-use Web based GUI In-band control possible Full SNMP v2 support



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



Ordering

GigaCaster II-ASI1: TS over IP Gateway - 1 ASI port enabled
GigaCaster II-ASI2: TS over IP Gateway - 2 ASI ports enabled
GigaCaster II-ASI4: TS over IP Gateway - 4 ASI ports enabled
GigaCaster II-ASI8: TS over IP Gateway - 8 ASI ports enabled

Options

- DistriGuard : Automatic 1+1 unit redundancy (ASI>IP)
- DualIP : Redundancy of IP streams
- NN6-SFP : 1+1 SFP slot
- NN6-ASI_Board : Pre-equipment of 4 additional ASI ports
- NN6-In48V : 48 V input instead of 110V/220V
- NN6-DualPower : Redundant power supply

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