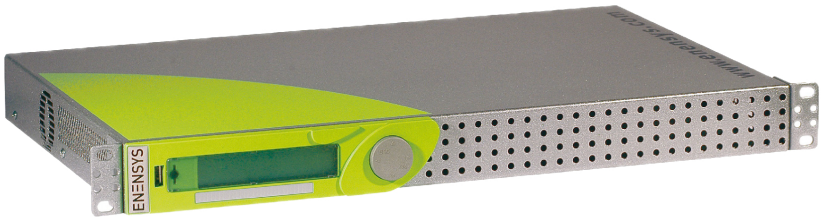
GigaCasterII High Density TS Over IP Gateway



GigaCasterII is ENENSYS bidirectional TS over IP gateway to deliver digital TV content over IP networks.

ENENSYS GigaCasterII is a bidirectional TS over IP gateway that provides a versatile, dense, and reliable solution for delivering digital TV content over IP.

Dense TS over IP Gateway

GigaCaster II is a high density TS over IP gateway that can carry 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, MPEG-4 (H.264), HEVC (H.265) video content in SD, HD or UHD format.

IP jitter & Packet Loss Management

The GigaCaster II is the most efficient TSoIP 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.

Unit and Streams Redundancy Schemes

When broadcasting over Single Frequency Network, the GigaCaster II 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.

Versatile and Multi-Standard Gateway

The Gigacaster II can be set up as an ASI to IP or IP to ASI converter.
Supporting ATSC, DVB, and ISDB-T standards, it can be deployed in multiple broadcast environments where it is required to connect legacy equipment to IP networks.

Applications

- Studio/Head-end interconnection
- Primary or secondary distribution
- Point-to-point video delivery
- DVB-T/DVB-T2 distribution to transmitters
- Reliably connect legacy ASI devices to IP networks

Other benefits

- Up to 8 TSoIP streams managed
- Unicast, Multi-Unicast and Multicast support
- Bidirectional ASI or IP delivery in the same unit
- 1+1 unit redundancy with DistriGuard
- 1+1 stream redundancy with Dual IP option

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Technical specifications

INPUTS/OUTPUTS

Control
2x Gigabit Ethernet (RJ45) for GUI/SNMP

ASI
MPEG-2 Transport Stream over ASI
Up to 8 bidirectional DVB-ASI (BNC)
Up to 100 Mb/s per TS
Up to 400 Mb/s over all TS with FEC

GPS
1x 10 Mhz input for accurate bit rate

IP
MPEG-2 Transport Stream over IP
2x Gigabit Ethernet (RJ 45)
2x Optional SFP port
600 Mb/s maximum throughput
RTP or UDP datagrams

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 in ASI > IP
1+1 streams redundancy - (DualIP option)

Monitoring
ETR290 Prioity1 Monitoring on ASI ports
Network Jittering
Packet loss/recovered/out-of-sequence/reordered
Real-time bit rate input

Control and Supervision
Easy-to-use web based GUI
In-band control possible
Full SNMP v2 support

PHYSICAL

Height
1.7 in (44 mm)

Width
17.48 (444 mm)

Depth
10.79 in (274 mm)

Format
1 RU, width 19 in

Front Panel
LCD display for control & monitoring

Power Supply
100-240 V AC/48 V DC (option)

Power consumption
20 W

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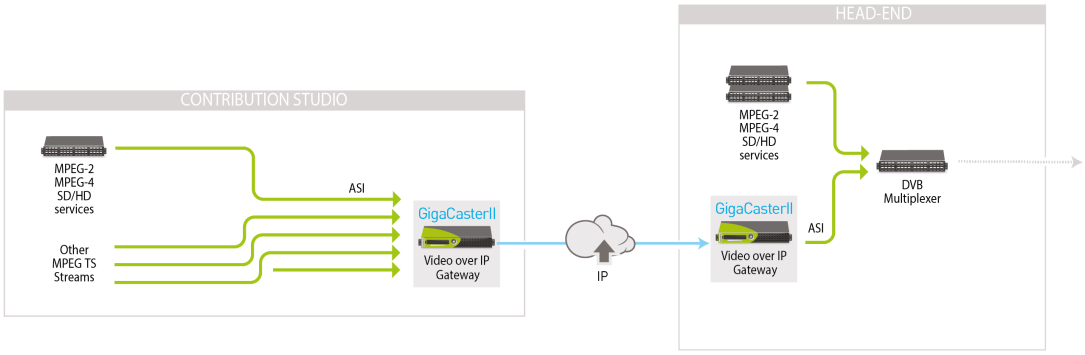
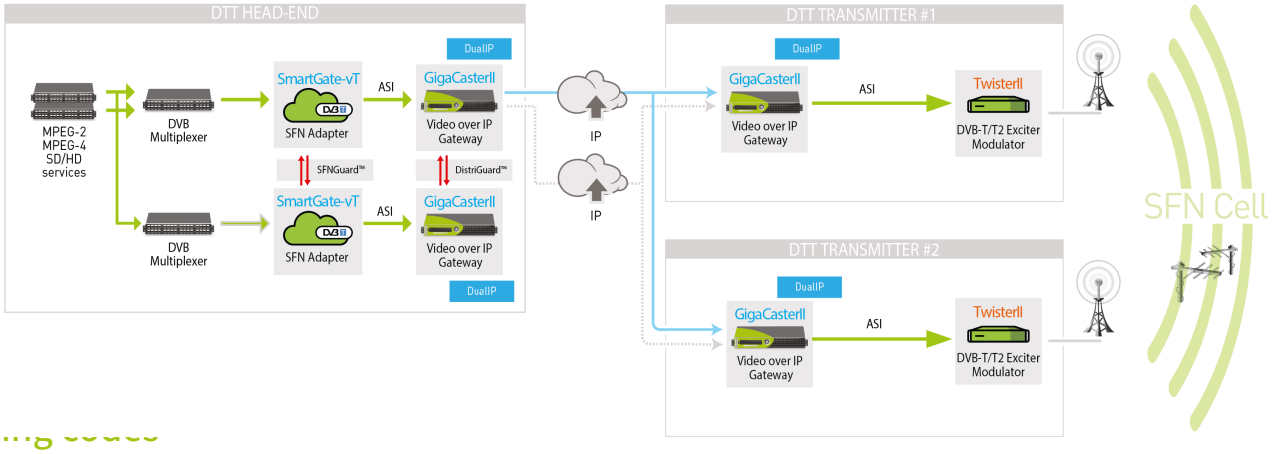
GigaCasterII Typical Use Cases

Point-to-Point contribution over IP



DTT Multiplex distribution to multiple transmitters sites



Ordering codes

GigaCasterII-ASI4

GigaCasterII shipped with 4 ASI ports and 4 activated DVB-ASI I/O

GigaCasterII-ASI8

GigaCasterII shipped with 8 ASI ports and 8 activated DVB-ASI I/O

Ordering options

NN6-SFP (Hardware option)

Dual SFP slot option. SFP module not provided - Hardware option

NN6-In48V (Hardware option)

48V DC input voltage instead of 110V/220V - Hardware option

DualIP

Redundancy of IP streams option

NN6-In220V-Redundant (Hardware option)

110/220V Redundant power supply option - Hardware option

NN6-In48V-Redundant (Hardware option)

48V Redundant power supply option - Hardware option

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