

Internet Distribution Gateway

DMG 7000



Utilizing the latest software-based platform from Sencore, the DMG 7000 is focused on providing a gateway between broadcast MPEG/IP networks and internet-based distribution protocols.

These ever-growing protocols like SRT, Zixi, RIST and HLS allow content providers to use consumer based internet connections to provide reliable, low-cost distribution networks.

No longer is high-cost satellite and fiber links required to backhaul high quality content from remote sites to head-ends or distribute content to regional hubs. Being a software-based, the DMG 7000 can be deployed on COTS hardware in a variety of form factors from mini-PCs to 1RU rack mount servers and virtual environments such as AWS or Google Cloud.

Reduce your CAPEX and OPEX expenditures and utilize the latest technologies in internet distribution to broadcast your content.

Content Distribution over the Internet

Enable low-cost distribution workflows using protocols like SRT, Zixi, RIST or HLS on the open internet. Reduce OPEX and CAPEX of backhaul or backup networks.

Bridge Between Managed and Unmanaged Networks

Backhaul over the open internet with advanced encapsulation methods. Receive and transmit protocols such as SRT, Zixi, RIST and MPEG/IP for broadcast workflows.

Key Features

- Gateway between MPEG/IP and Internet Distribution Protocols
 - · SRT protocol with AES encryption
 - · Zixi protocol with ZEN Master integration
 - · RIST protocol in simple and main profiles. DTLS and PSK encryption
 - · HLS reception in push and pull modes
 - · MPEG/IP RTP/UDP as MPTS or SPTS
- Software deployment on COTS hardware or virtual environments
 - · Mini-PC or 1RU rack mount for any application
 - · Cloud environments like AWS or Google Cloud

Internet Distribution Gateway

DMG 7000



SPECIFICATIONS

Input and Output Options

MPEG/IP Receive and Transmit

Receive

Input Type	UDP, RTP and RTP with extension headers Multicast and unicast CBR and VBR streams SMPTE 2022/CoP3 FEC SMPTE 2022-7 hitless switching
Multicast filtering	Filter based on IP address VLAN tagging IDs
Buffer size	1-4000KB or 1-4000ms
Bitrate range	.25-200 Mb/s
Packets/IP frame	1-7 MPEG packets/IP frame
IGMP compatibility	Version 2 and 3

SRT Receive and Transmit - DMG 70701

Protocol and IP Range	UDP, unicast
Negotiation modes	Caller, listener, rendezvous
Latency	20-8000ms, user configurable
Bitrate range	0.25-50 Mb/s
Bandwidth overhead	0-50% of content bitrate
Encryption/Decryption	AES-128, AES-256 10-79 UTF-8 characters
Packets/IP frame	Auto detect, user configurable 1-7

Zixi Receive and Transmit - DMG 70702

Protocol and IP range	UDP, unicast
Modes	Connect or pull mode, to Broadcaster Remote ID for transmit/receive from AWS MediaConnect
Latency	30-10000ms, user configurable
Bitrate range	0.25-50 Mb/s
FEC overhead	0-50% of content bitrate
Bandwidth overhead	0-50% of content bitrate
Encryption/Decryption	AES-128, AES-192, AES-256 AES- 128, AES-192, AES-256
Packets/IP frame	Auto detect, user configurable 1-7

RIST Receive and Transmit - DMG 70703

Profiles	Simple Main (Full datagram & reduced overhead modes)
Protocol and IP range	RTP, RTCP, unicast, multicast
Bitrate Range	0.25-50 Mb/s
Encryption/Decryption	DTLS or PSK
Latency	1-8000ms, user configurable
Link Bonding	Fully redundant Bandwidth distributed

