

# 570IPG-3G18-SFPP12

## Hybrid Baseband/Ethernet Infrastructure – Media Gateway

The 570IPG-3G18-SFPP12 is Evertz 3rd generation low latency, ultra high-density gateway for SDI over 10G Ethernet.

With direct conversion of up to 18 SD/HD/3G signals to IP using SMPTE2022-6 formatting the 570IPG-3G18-SFPP12 series delivers unparalleled processing densities. Additionally, it also supports up to 2 audio TDM ports for carrying discrete audio over IP in addition to the primary video.

With functionality such as integrated frame sync and retiming on the SDI output stage, the 570IPG is really the only platform that will deliver SMPTE2022-6 compliance today and is also architected in the data path layer to support future SMPTE2022 series encapsulation and formatting methodologies.

The 570IPG-3G18-SFPP12 also provides per input AVM monitoring, auto timing, time stamped Ethernet outputs.

The 570IPG-3G18-SFPP12 series modules incorporates patent pending multipath, multi-flow packet merge base network bit error resilience for 100% QoS.

570IPG-3G18-SFPP12 can be managed via Integrated HTTP web interface as well as SNMP management via Frame Controller.

### ►Features & Benefits

#### System I/O

- 18 x 3G/HD/SD Bidirectional on the fly configurable copper coax ports
- Broad standards support: 1080p/59.94, 1080p/50, 1080i/59.94, 1080i/50, 720p/59.94, 525i/59.94, 625i/50
- 2 x Evertz EMR Audio TDM
- 12 SFP+ ports in hot main/hot backup configuration with flexible channel mapping for bandwidth optimization

#### System Processing and encapsulation over IP:

- Loop back of 10GE to SDI path allow central NOC monitoring of REMOTE SDI output
- Video at native resolution
- 4 groups of audio (8 groups for validated 1080p/60 sources)
- Full VANC carriage
- Integrated Cross Connect for regeneration of SDI outputs
- Frame sync buffer that can be locked to local genlock or IEEE1588 PTP and used for output phase alignment and auto timing

#### Standard Compliances

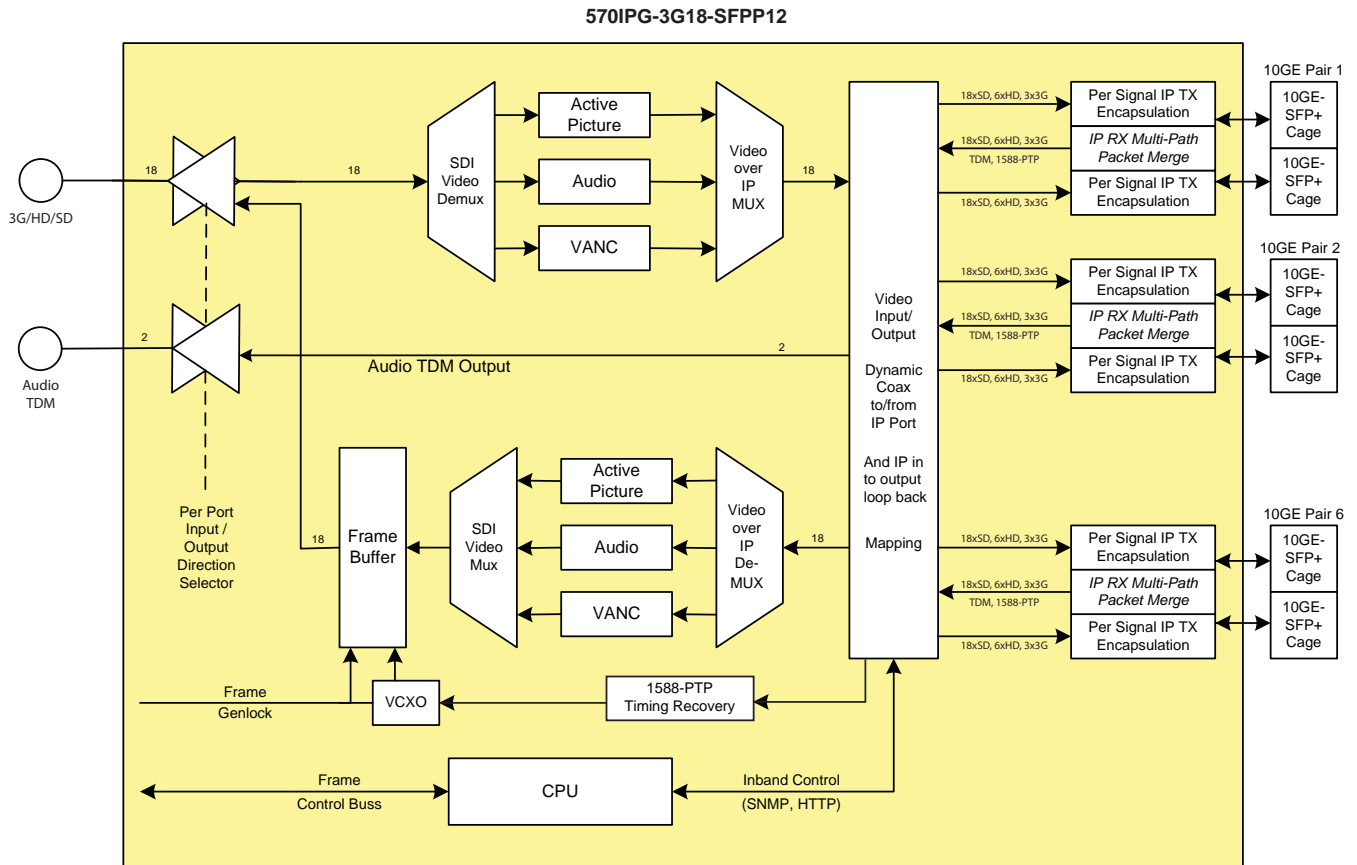
- Audio carriage as SMPTE302M or SMPTE2022-6
- VANC carriage as SMPTE2038 or SMPTE2022-6
- Video carriage as SMPTE2022-6

#### Timing Management

- 570IPG-3G18-SFPP12 optionally accept streaming IEEE 1588 PTP via 10GE network connections with ability of time-stamping all content output over ethernet (UTC at time of reception)

#### Control and Baseband Processing

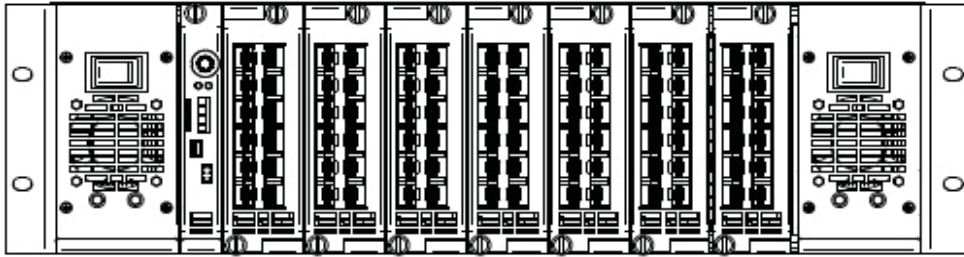
- Modules support control over frame ethernet or inband from 10G interface
- Modules have on board AVM on all baseband signals
- SNMP control from Vistalink or MAGNUM Unified Control



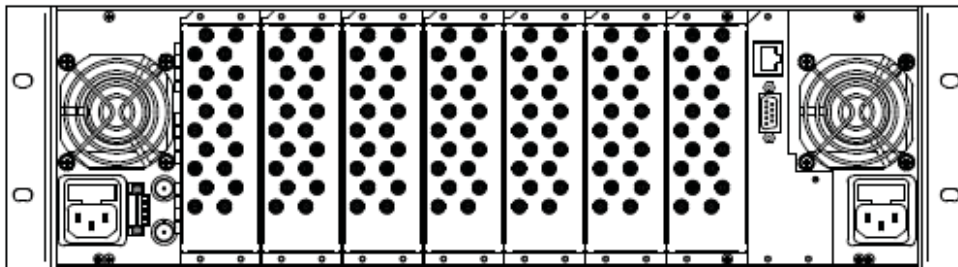
The Complete Solution Provider



**Front Panel - Optical Access**



**Rear Panel - Coax Access**



► Specifications

<b>Serial Digital Video:</b>		<b>TDM:</b>	<b>Electrical:</b>
Standards:	SMPTE 424M (3Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s)	Connector: DIN 1.0/2.3	Power: TBD
		<b>Ethernet Interface:</b> 12 x 10GE SFP+	Voltage: 12VDC
			EMI/RFI: Complies with FCC Part 15, Class AEU EMC directive
<b>Serial Video Input:</b>		<b>Video Encapsulation:</b> SMPTE2022-6 or Video, Audio (302M), VANC(2038) in TS/PAT/PMT over IP	<b>Physical (number of slots):</b>
Number of Inputs:	18		HD/SD: 2
Connector:	DIN 1.0/2.3		3G: 3
Input Equalization:	Automatic to 100m @ 3 Gb/s, 150m @ 1.5 Gb/s & 350m @ 270 Mb/s	<b>Data Format:</b> Ethernet/IP/UDP	
Return Loss:	>12dB up to .5 GHz, >10dB up to 3GHz	<b>Control Signaling:</b> SDN or IGMP V2/V3 (SSM Support)	<b>Enclosures:</b>
			570FR: 15 slot 3RU chassis
<b>Serial Video Output:</b>			
Number of Outputs:	18* (ports shared with inputs)		
Rise and Fall Time:	Per SMPTE spec		

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**570IPG-3G18-SFPP12** Hybrid Baseband/Ethernet Infrastructure – Media Gateway

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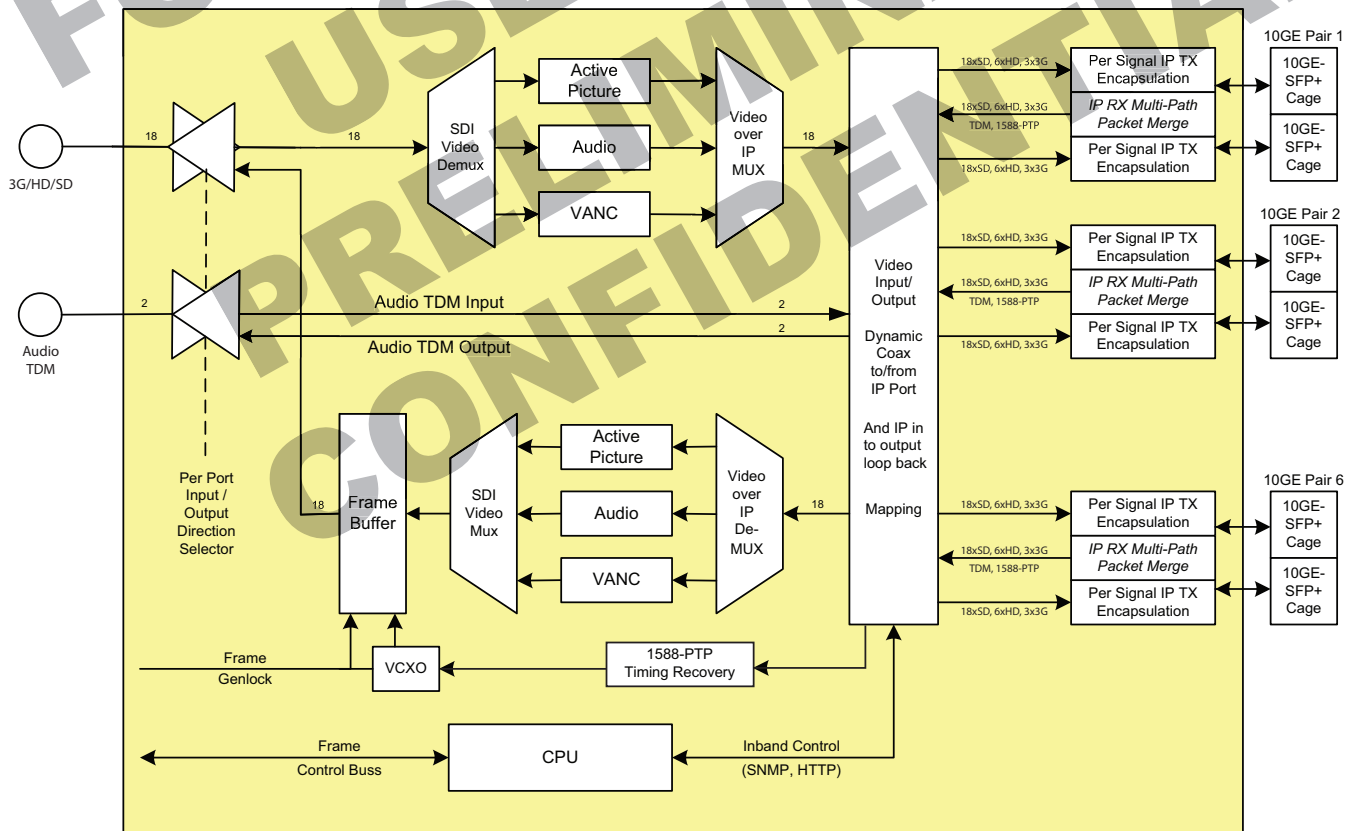
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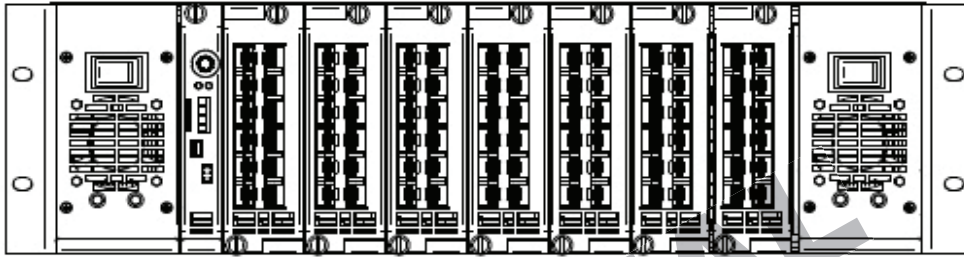
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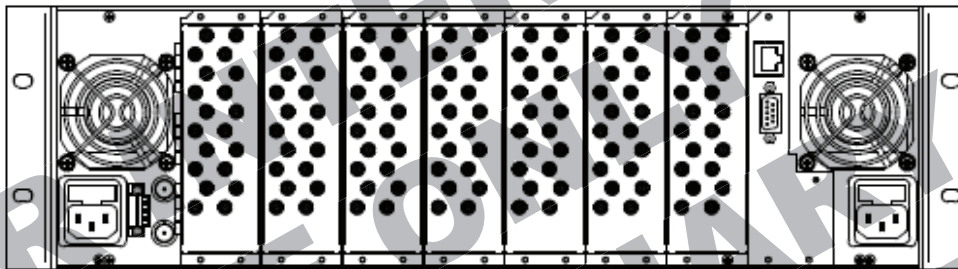
570IPG-3G18-SFPP12



Front Panel - Optical Access



Rear Panel - Coax Access



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**PTP Source**  
5601MSC+PTP

Compatible TDM I/O Port Interface Modules

<b>EMR-IP96-AESU</b>	96 Unbalanced AES inputs with TDM outputs
<b>EMR-IP48-AESU</b>	48 Unbalanced AES inputs with TDM outputs
<b>EMR-IP96-AESB</b>	96 Balanced AES inputs with TDM outputs
<b>EMR-IP48-AESB</b>	48 Balanced AES inputs with TDM outputs

<b>EMR-IP48-AA</b>	48 Analog stereo inputs with TDM outputs
<b>EMR-IP96-LTC</b>	96 LTC inputs with TDM outputs
<b>EMR-IP48-LTC</b>	48 LTC inputs with TDM outputs
<b>EMR-IP16-MADI</b>	16 MADI inputs with TDM outputs
<b>EMR-OP96-AESU</b>	96 Unbalanced AES outputs with TDM inputs
<b>EMR-OP48-AESU</b>	48 Unbalanced AES outputs with TDM inputs
<b>EMR-OP96-AESB</b>	96 Balanced AES outputs with TDM inputs
<b>EMR-OP48-AESB</b>	48 Balanced AES outputs with TDM inputs
<b>EMR-OP48-AA</b>	48 Analog stereo outputs with TDM inputs
<b>EMR-OP96-LTC</b>	96 LTC outputs with TDM inputs
<b>EMR-OP48-LTC</b>	48 LTC outputs with TDM Inputs
<b>EMR-OP16-MADI</b>	16 MADI outputs with TDM inputs