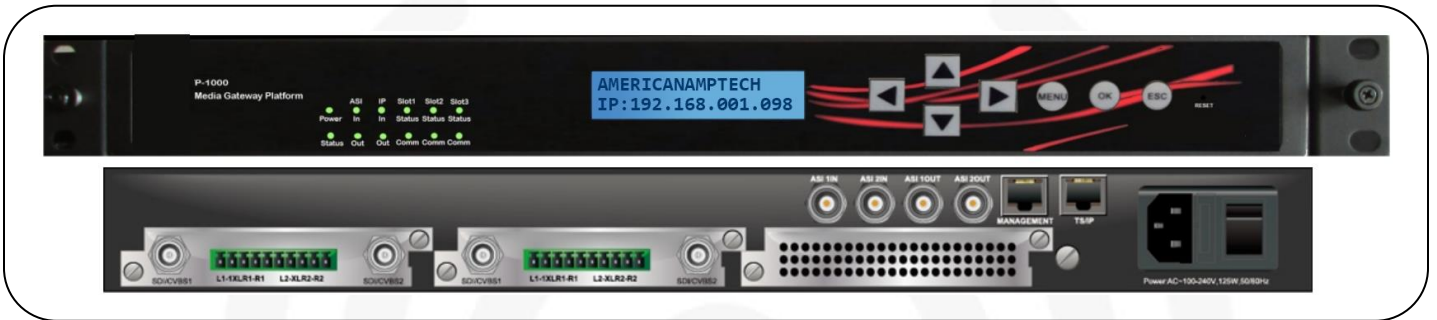


AAT-P1000

Media Gateway Platform



ABOUT

The P-1000 is American Amplifier Technologies high-value product for medium and small sized service operators. It provides proven headend technology in a compact, 1RU chassis. With over 30 different input and output module options that can be combined as needed, it offers a true, comprehensive video delivery solution. Whether it is for multiplexing, receiving, encoding, transcoding, modulating, scrambling or descrambling applications, the P-1000 provides the perfect combination of capacity, flexibility, and reliability at an affordable price point.

KEY FEATURES

- Any input to any output capability
- Compact and modular design: 1RU with up to 3 modules
- Embedded ASI and IP interfaces in the main chassis
- Supports up to 4Gbps video multiplexing and TS stream multiplexing/grooming
- Supports EIT multiplexing (optional) and EPG/SI insertion (both DVB and ATSC standard)
- Dual, redundant power supplies (optional)
- Easy upgrades to support new technologies by swapping modules
- Low power consumption and high reliability with MTBF $\geq 100,000$ hours
- Multi-function multiplexing, receiving, encoding, transcoding, modulation and more

APPLICATIONS

Encoding/Transcoding

- Up to 12 SD or HD programs of encoding
- Up to 24 SD or 6 HD programs of transcoding
- Multi-audio MPEG/AAC/AC3 encoding Receiving/Digital-Turn-Around
- 12 channels or frequencies of DVB-S/S2/C/T/T2, ISDB-T and 8VSB receiving
- Descramble, remultiplex and pass-through to ASI, IP or RF output

Modulation

- Up to 24 channels of QAM modulating
- Up to 12 channels of OFDM/DVB-T modulating
- 8 channels of trans-modulation to QAM (from DVB-S/S2/T/T2, ISDB-T or 8VSB)

Stream Processing

- Up to 4Gbps processing (approx. 1000 programs)
- 14 ASI ports of multiplexing
- Internal multiplexing or pass-through capabilities
- EIT multiplexing (optional)
- Supports SI and EPG data insertion

SPECIFICATIONS

CHASSIS	
Capacity	4Gbps (approx.. 1000 programs)
Slot Number	3 slots
Interface	2 x ASI inputs (BNC, Female, 75Ω ports)
	2 x ASI outputs (BNC, Female, 75Ω ports)
	1 x GbE TS/IP (RJ45)
	1 x management (RJ45)

ASI (on-chassis)	
Bit-rate per Port	1 MPTS/SPTS at max. 100Mbps per port

MULTIPLEXING	
Routing	Any input to any output
Table Supported	SI/PSI/PSIP
PID Processing	Pass-through, remapping, filtering
EIT Processing	Re-multiplexing (optional) and pass-through
External Data	EPG and SI insertion

MANAGEMENT	
Hardware Interface	1 x RJ45 (100Mbps)
User Interface	LED indicators
	LCD screen
	Front panel control
	Web UI
	SNMP (monitoring only)

IP (on-chassis)	
Protocol	TS over UDP/RTP, unicast/multicast
MPEG TS	MPTS and SPTS
Channel	64 streams input and 32 streams output
Bit-rate per Port	Max. 780 Mbps (effective 650Mbps)
De-jittering	PCR
Management	IGMP V1, IGMP V2, IGMP V3
FEC	ProMPEG, input and output

PHYSICAL & ENVIRONMENTAL	
Input Voltage	90~260 VAC
Dual Power Supply	Optional
Power Consumption	Max. 60W
Chassis Dimension	19" W x 17" D x 1.75" H, 1 RU
Operating Temperature	0° C ~ 50° C
Storage Temperature	-10° C ~ 70° C
Operating Humidity	< 95%
MTBF	≥ 100,000 hours

ENCODING SAMPLE CONFIGURATIONS

- 4 SD Encoders input, MUX, RF/ASI/IP outputs
- 2 SD Encoders input, MUX, RF/ASI/IP outputs
- 3 SD/1HD Encoders input, MUX, RF/ASI/IP outputs
- 2 SD/2HD Encoders input, MUX, RF/ASI/IP outputs

CONVERSION SAMPLE CONFIGURATIONS

- RF/ASI/ input, MUX, RF/ASI/IP outputs
- ASI/IP input, MUX, RF/ASI/IP outputs
- RF/ASI/IP input, MUX, RF/ASI/IP outputs
- And more!!