

AVP 1000 Network Adaptor



The AVP 1000 Network Adaptor provides a cost effective platform for basic MPEG transport stream processing; simple “any to any” network adaptation between ASI, IP, and G-703; BISS scrambling and simple service level transport stream re-multiplexing*

The AVP 1000 is based on a compact 1RU form factor with up to six hot swappable option slots with a single or dual PSU (Power Supply Unit) for redundant operation.

As the chassis and software are shared by all AVP products, users have the option of later upgrading to the full AVP 2000 Contribution Encoding or AVP 3000 Voyager specification, which can include MPEG-2, MPEG-4 AVC, JPEG-2000 and HEVC workflows. Sharing the same chassis and software code delivers users significant benefits primarily simplifying installation, training, integration and support, compared to an expensive multi vendor ‘mix and match’ approach.

The AVP 1000 Network Adaptor is an integral part of MediaKind’s portfolio of C&D products, which also includes receivers, multiplexers and modulators.

*Manual remuxing only, does not support CA components

Product Overview

High Flexibility, Reliability and Serviceability

The MediaKind AVP platform provides new levels of flexibility, reliability and serviceability.

The platform itself is designed to address both the need for density, with up to six option slots, and the need for high resilience by making all the option slots hot swappable. Increased levels of reliability may be achieved through the addition of a dual PSU's version of the chassis. A standard IP interface and a wide range of separate I/O options provide interfacing to multiple hybrid networks concurrently. The AVP 1000 allows in-field serviceability, portability and system reconfiguration to address the widest range of C&D applications through future upgrade paths.

Base Unit Features

AVP 1000 Network Adaptor

- Six hot swappable option slots with single PSU AVP1000/1RU/BAS/1AC/A
- Four hot swappable option slots with dual PSU AVP1000/1RU/BAS/2AC/A
- Six hot swappable option slots with dual PSU with flying leads AVP1000/1RU/BAS/2ACFL/A

Base Chassis Functionality Includes;

- Control via 2x electrical Ethernet (100/1000BaseT)
- MPEG-2 Transport Stream generation
- SMPTE 2022-1/-2 (Pro-MPEG) FEC on a single SPTS/MPTS
- Encryption of output MPEG-2 Transport Stream using Basic Interoperable Scrambling System (BISS) for secure contribution links Supports BISS modes 0, 1 and E
- Service level Remux
- “Any to Any” interfacing between ASI, IP, and G.703

Platform Processing Capacities

- Up to six ASI cards
- G-703 cards

The AVP 1000 chassis is based on the same chassis as the AVP 2000 Contribution Encoder enabling upgrades with encoder modules to become an AVP 2000 or even an AVP 3000 with the addition of a Satellite Modulator option making the unit highly flexible and able to address multiple applications.

Specifications

Hardware Options

ASI I/O Module (CE/HWO/ASI/IO/A)	One slot per module 2 x ASI MPEG-2 Transport Stream inputs Max input bit rate 215Mb/s Maximum six modules
G703 Module (CE/HWO/G703/A)	One slot per module Supports E3 and DS3 input, and output connectivity Max output bit rate 40Mb/s

Transport Stream Interfacing

Output	2x Electrical Ethernet (10/100/1000BaseT) Maximum aggregated TS not to exceed 850Mb/s
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Management

Management	2x Electrical Ethernet (10/100/1000BaseT) SNMP v1/v2/v3, for alarm traps User management via web browser only
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Physical and Power

Dimensions (W x H x D)	44.20 x 4.45 x 59.69 cm (17.40 x 1.75 x 23.5 inches)
Weight	8.0 kg (17.6 lbs) unpopulated
Input Voltage	100-240 VAC 50/60 Hz
Input Power	70W (chassis only) Up to 150W (depending on option modules fitted)

Environmental Conditions

Operating Temperature	-10°C to +50°C (14°F to 122°F)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Relative Operating Humidity	10% to 90% (non-condensing)

Compliance

Compliance	CE marked in accordance with EU Low Voltage and EMC Directives
EMC Compliance	EN55022, EN55024, AS/NZS3548, EN61000-3-2 and FCC CFR47 Part 15B Class A
Safety Compliance	EN60950, IEC60950