

# MediaKind Stream Processing M1 Server



## Stream Processing Appliance

The MediaKind Stream Processing M1 Server is a powerful stream processing platform. It is capable of handling up to 1 Gbit/s of data throughput.

The M1 server provides:

- 2 x Gigabit Ethernet ports for control and monitoring
- 4 x 10Gigabit Ethernet ports for data ingress and egress
- 2 x Gigabit Ethernet ports for connection to CA systems
- Dual redundant AC power supplies

MediaKind Stream Processing can provide:

- IP (UDP or RTP) input and output of MPEG Transport Streams
- RTP re-ordering
- IGMP V3 redundancy
- Input bit-rate monitoring and CC error detection
- Full re-multiplexing support including real-time PSI regeneration, and dynamic rules-based pass-through of descriptors
- PID re-mapping
- SI/PSI generation/re-generation and insertion from external source
- Statistical multiplexing bit-rate allocation for MediaKind Encoding Live
- SMPTE 2022-1 FEC on input and output
- DVB-CSA V1, V2 scrambling
- DVB-CSA V3 and AES-128 scrambling\*

## MediaKind Stream Processing

### Input

<b>Transport Stream Input</b>	UDP or RTP encapsulated MPEG transport stream Unicast or multicast (IGMP V2,V3) Source redundancy (active/active) SMPTE 2022-1 FEC Input bit-rate monitoring and CC error detection
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### Stream Processing

<b>Multiplexing</b>	Full re-multiplexing support including real-time PSI regeneration, and dynamic rules-based pass-through of descriptors PID re-mapping Data component insertion SI/PSI generation, re-generation and insertion from external source
<b>Statistical Multiplex Controller</b>	Statistical multiplexing bit-rate allocation for MediaKind Encoding Live
<b>Scrambling</b>	DVB-CSA V1, V2 scrambling DVB-CSA V3 and AES-128 scrambling (contact MediaKind for availability)

### Output

<b>Transport Stream Output</b>	UDP or RTP encapsulated MPEG transport stream Unicast or multicast (IGMP V2, V3) Dual source redundancy (active/active) SMPTE 2022-1 FEC
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### Scaling

<b>Up to 1 Gbit/s of data throughput</b>	Up to 300 services, up to 4 Mbit/s EMMs per TS up to 1000 ECMs, up to 8 simultaneous CAS connections
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### Licensing

<b>Licensed per 1 Mbit/s of output</b>	FAZ 101 0408/278 - MFSms Video Processing (1 per 1 Mbit/s of output data rate)
<b>Licensed per scrambled service</b>	FAZ 101 0408/354 - CA Per Service (Note: DVB-CSA V3 and AES-128 will require additional licenses)

## Inputs/Outputs

<b>Data Ingress / Egress</b>	4 x 10 Gigabit Ethernet ports
<b>Interface to CA System</b>	2 x Gigabit Ethernet ports
<b>Control and monitoring</b>	2 x Gigabit Ethernet ports

## Physical and Power

<b>Dimensions (W x D x H)</b>	440 x 560 x 44mm (17.2 x 22 x 1.75" approx.)
<b>Input Voltage</b>	110 VAC / 240 VAC
<b>Power Consumption</b>	550 Watt max
<b>Cooling</b>	Integrated fans

## Environmental Condition

<b>Operating Temperature</b>	0°C to 50°C (32° to 122°F)
<b>Storage Temperature</b>	-20°C to 65°C (4° to 150°F)
<b>Relative Humidity</b>	5% to 95% (Non-condensing)

## Compliance

<b>Compliance</b>	CE Marked in accordance with all applicable EU Directives
<b>EMC Compliance</b>	EN55032, EN55024 and FCC CFR47 Part 15B Class A
<b>Safety Compliance</b>	EN60950-1 and IEC60950-1