

EV90

Media Exchange Platform



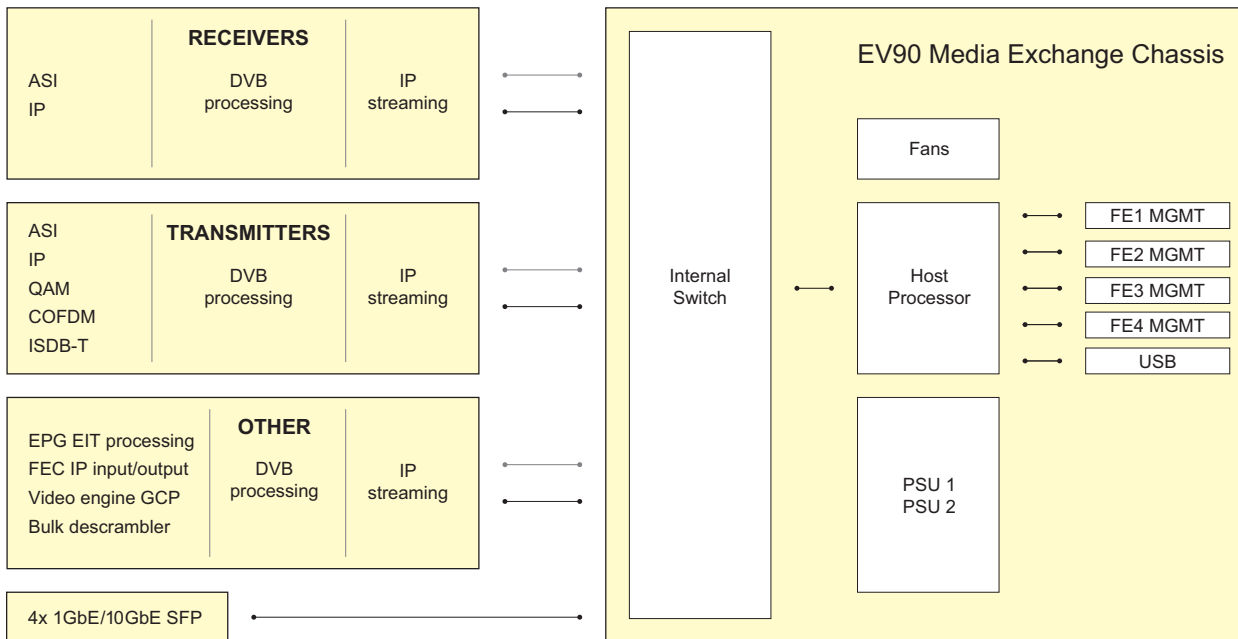
The EV90 is a digital headend and stream processing platform in a high-density 1RU form-factor. The EV90 manages multiplexing, PSI/SI table insertion, scrambling and can also provide up to 168x QAM-modulated output signals for cable-headend applications. Equipped with 4x 10GE data ports, the EV90 has options for flexible configurations including the use of 1+1 port redundancy or stream redundancy using configurable triggers and service ID detection follow-up.

Up to six processing modules can be housed inside of the chassis to facilitate various applications such as IP and ASI input/output modules and modulated RF output modules.

The EV90 platform can be utilized as a single function or multi-function chassis system, depending on the type of application such as content ingestion, conditional access, multiplexing and broadcasting.

Features & Benefits

- Modular, scalable platform, high density and small footprint
- Low power consumption, low heat-load
- IP and ASI inputs/outputs and RF outputs facilitate numerous signal processing applications
- Wire-speed scrambling and multiplexing
- 44 Gbps throughput
- 168 QAMs in 1RU
- Supports over 30 CA systems
- High-density Edge QAM (EQAM) platform



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Specifications

Chassis:
Mounting: 19" rack mountable, 1RU rails for easy installation
Dimensions: 19" W x 1.8" H x 20" D (483 x 46 x 508 mm)
Operating Voltage: 100–240VAC 50/60Hz, -48V DC
Power Consumption: Max. 300W for a fully occupied chassis
Operating Temp.: -10–55°C (14–131°F) ambient
Relative Humidity: Up to 90% (non-condensing), cooling replaceable fans
Cooling: Hot-swappable fans

Management Interfaces:

- 4x 10/100 Base-T for CAS and NMS USB for initial setup

Stream Interfaces:

- 4x 1GbE/10GbE SFP slots, supports electrical and optical SFP modules
- Main and 1+1 redundancy options

Management and Monitoring:

- Web user interface
- SNMP monitoring
- API

Interface Modules:

- 6x slots for hot-swappable processing modules

ASI Streaming:

Standard: EN50083–9
Impedance: 75Ω
Inputs or Outputs: 4 ports
Max. Speed: 216 Mb/s per interface

IP Streaming:

Packet format: DVB transport packets in UDP/IP, RTP/UDP/IP
Traffic Type: Unicast or multicast
Max. IP Streamer: 120 per module
Max. Streaming Capacity per Module:
DVB Scrambling: 394 Mb/s
AES Scrambling: 490 Mb/s

DVB Common Scrambling

Algorithm Content Protection:

Max. Service to be Scrambled per Module: 120 services

QAM Output:

Standard: ITU-T J.83 Annex A, B, C
QAM Constellations: Docusis CM–SP–DRFI–116–170111 (64, 128, 256)
Symbol Rate: 4...7.4 MS/s
Impedance: 75Ω
Max. Channels: 28 channel modulation per module
Output Frequency: 50–1000Mhz in 50kHz steps

Ordering Information

EV90FR Digital headend processing 1RU chassis, 6 module slots. AC power supplies sold separately.

Ordering Options:

EV90–FP EV90 cover plate, must be installed to empty module slots.
EV90FR–PS Power supply module for EV90–FR Frame.
EV90IP–60 EV90 IP Module supports 60 IP input streams 60 IP output streams.
EV90IP–4ASI EV90 Quad ASI input Interface, EIT demux
EV90OP–4ASI EV90 Quad ASI output Interface, EIT mux with 4 IP inputs.
EV90FR–HB–CBL–1FT 1 foot 1+1 backup cable used for heartbeat signaling between EV90 chassis.
EV90MD–(12/16/20/24/28)DVB–C EV90 QAM Modulator, 12/16/20/24/28 QAMs, 1 RF output, DVB processing, EIT multiplex
EV90MD–DVB-T EV90 DVB–T Modulator, 1 RF output, DVB processing, EIT multiplex
EV90–EPG EV90 EPG processor module, EPG data storage, EIT data processing

Software Ordering Options:

EV90OP–SW–MUX Software option to enable Multiplexing (multiple IP inputs per ASI output port).
One license per EV90OP–4ASI module.
EV90IP–SW–MUX Software option to enable Multiplexing. One license per EV90IP–60 and EV90IP–120 module.
EV90OP–SW–SCRAMBLE Software option to enable DVB Simulcrypt scrambling. One license per EV90OP–4ASI module.
EV90IP–SW–SCRAMBLE Software option to enable DVB Simulcrypt scrambling. One license per EV90IP–60 and EV90IP–120 module.
EV90FR–SW–SCRAMBLE Software license to DVB simulcrypt scrambling (enables CAS server connection) for EV90 platform. One license is required per EV90 frame.
EV90FR–SW–BACKUP Software license to enable 1+1 chassis backup for EV90 platform. One license is required per EV90 frame. Requires EV90–FR–HB–CBL–1FT.
EV90MD–CK–4CH Software option to enable additional 4 QAMs, for up to 28 QAMs.
EV90MD–SW–MUX Software option to enable Multiplexing. One license per EV90MD–xDVB–C
EV90MD–SW–SCRAMBLE Software option to enable Scrambling. One license per EV90MD–xDVB–C

SFP Ordering Options:

EV90SFP10G–TR13 SFP+ 10 G Optical SMF 1310 nm, 10 km used with EV90 Platform.

Contact factory for full system design and quotation.