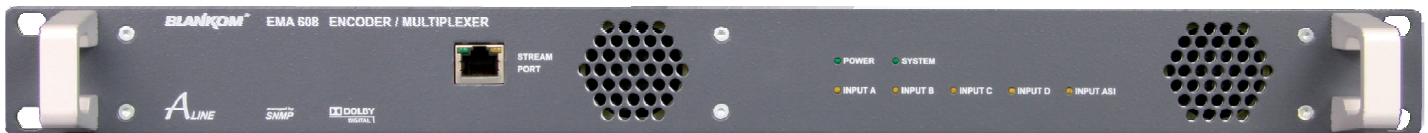


## ENCODING/MULTIPLEXING SD & HD

### EMA Series 4way MPEG-4/H.264 Encoder/Multiplexer



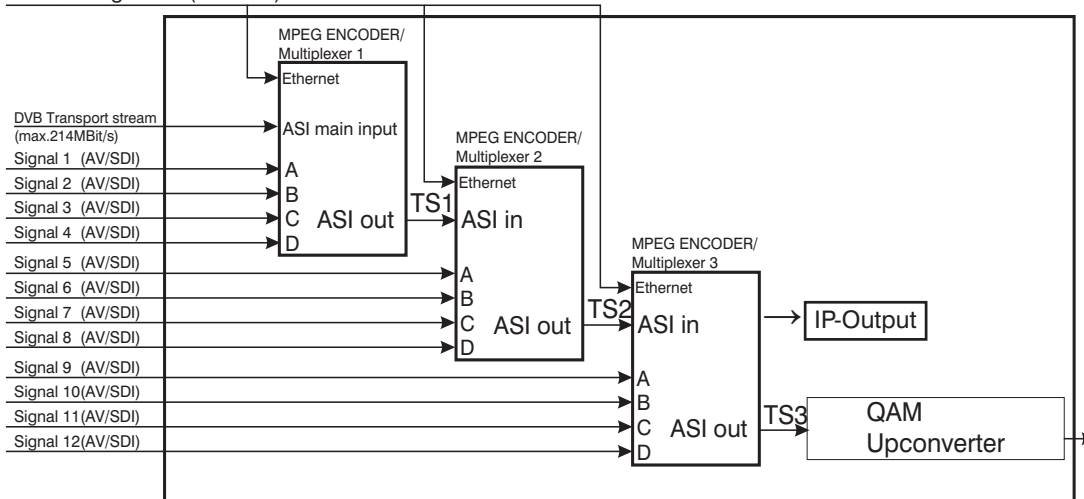
The EMA Series features professional, flexible and efficient Encoder/Multiplexer modules perfectly suited for CATV, SMATV and IPTV applications. The product combines encoding and multiplexing in one unit featuring first class system parameters and excellent Audio/Video quality, including Dolby Digital, both in SDTV and HDTV. The EMA Series offers a compact solution for encoding of up to 4 incoming signals into ASI and IP (SPTS/MPTS) transport stream processing digital SDI as well as HDMI and analog Audio/Video signals. The EMA Series is equipped with an ASI input that enables the insertion of an additional ASI TS or the cascading of up to 8 EMAs to stream multiple programs. The EMA Series can be configured locally or remotely via a web server and also features an SNMP client.

#### Features

- Four A/V signals (analog, ASI, HDMI or SDI) are encoded and multiplexed into an ASI transport stream and an IP-Stream output (SPTS, MPTS)
- Efficient H.264 encoding with Dolby AC3
- Individual adjustment of incoming Audio/Video signals
- Supports insertion of external ASI-TS also for cascading
- Cascadable up to 8 encoders
- MPEG-2 to MPEG-4 transcoding

#### Application Example

Data/configuration(Ethernet)



Application Example: Cascade of three encoders incl. QAM-Upconverter

managed by  
**SNMP**



ENCODER/MULTIPLEXER

# BLANKOM<sup>®</sup> USA



Back view

## Product Options

- **EMA 407: H.264 to MPEG-2 Transcoder • Multiplexer 2-channel**
- **EMA 408: H.264 Encoder FBAS/SDI • Multiplexer 4-channel**
- **EMA 508: H.264 AVC Encoder HDMI/SDI • Multiplexer 4-channel**
- **EMA 608: H.264 AVC / AC3 Encoder FBAS/SDI • Multiplexer 4-channel**

## Device Properties

- **19" 1 RU stand-alone module**
- **1 x ASI-Input with service filter, 1 x ASI-Output (max. 214 Mbps)**
- **Up to 8 EMA's can be cascaded to one ASI/IP TS**
- **Generation of all necessary DVB and ATSC tables**
- **Management/ adjustment via web interface**
- **IP streaming output (SPTS, MPTS)**
- **AC3 encoding (Dolby 2.0 for all installed encoder channels) - EMA 608**

## Technical parameter

<b>Encoder, Video Input</b>	<b>EMA 407</b>	<b>EMA 408/508/608</b>	<b>A/V Input</b>		
Standard	H.264/AVC HD/SD	PAL, SECAM, NTSC (M) SD-SDI (270 Mbps), HD-SDI (1.5 Gbps), MPEG-2 HD/SD	Video IN analog	1 V <sub>pp</sub>	
Compression	MPEG-2 (MP@ML) acc. ITU-T Rec. H.262/ISO/IEC	H.264/AVC (MP@L3.0/HP@L4.0) acc. ITU-T Rec. H.264/ISO/IEC	digital	800 mV <sub>pp</sub> audio embedded (AES/EBU, 48 kHz)	
Format/Size	480i, 576i, 720p, 1080i		Audio IN	4x DIN 45326 socket 8-poles/stereo 600 Ω / 10 kΩ symmetrically	
System bit rate	1024 ... 15 000 kbps (adjustable individually per channel)	1024 ... 20 000 kbps	<b>HDMI Input</b>		
<b>Encoder, Audio Input</b>			HDMI IN	HDCP compliant	
Compression	MPEG-1 Layer 2	MPEG-1 Layer 2 AC-3 pass through/AC-3*	<b>IP Streamport</b>		
Sampling rate / Bit rate	48 kHz, stereo / 64...384 kbps		Network connection	Ethernet, 10/100/1000 Base-T	
<b>Transport stream output</b>			Connector	RJ 45	
Protocol	DVB-ASI, burst/ continuous mode; DVB-ASI/ ATSC, burst- or interleave mode adjustable		Protocol	UDP, RTP	
Connector	BNC/ 75 Ω / 800 mV <sub>pp</sub>		Additional troubleshooting	pro-MPEG Code of practice 3 rev. 2	
Bitrate	1...214 Mbps, adjustable (1 kbps steps)		Encapsulation	accord. ETSI TS 102034	
Channel within TS	1...4 per unit, max. 8 units can be cascaded		<b>Remote control</b>		
<b>Transport stream input</b>			Adjustments via SNMP	Web interface via Ethernet IP Provisioning of a MIB parameter file	
Protocol	for DVB-ASI transport streams up to 214 Mbps (burst or interleave mode) input for multi-unit configuration		<b>Extensions</b>		
			Cascading	several EMA encoders can be casaded via the ASI interface to create one DVB transport stream	

\* not for all devices available

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