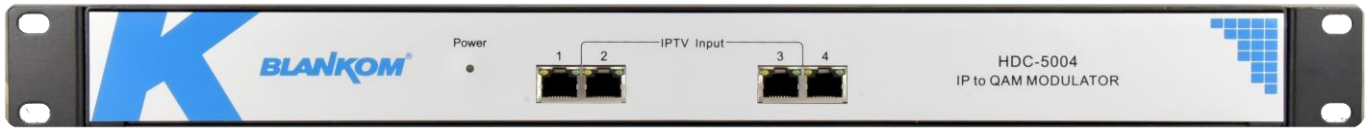




IP to 4 QAM Modulator



- 4 Ethernet IP input ports (IPTV 1,2,3,4)
- 512 IP (SPTS/MPTS) input over UDP/RTP protocol
- Support up to 748 PID's remapping per channel
- PCR adjusting/PSI/SI editing and inserting / PID Remapping/PID pass
- Excellent RF output performance index, MER≥40db
- 4 multiplexed or scrambled TS over UDP output
- 4 adjacent QAM carriers output, compliant to DVB-C (EN 300 429) and ITU-T J.83 A/B/C
- USB for upgrading CPU/FPGA
- IPTV Synchronization & NTP -> TDT
- Web-based Network management
- Accurate PCR adjusting
- Up to 180 PIDS remapping per channel
- Support DVB general scrambling system (ETR289), simulcrypt standards ETSI 101 197 and ETSI 103 197
- Supports RS (204,188) encoding
- Web-based Network management

*BLANKOM HDC-5004 modulates
up to 512 SPTS or MPTS IPTV channels
into 4 QAM (DVB-C) carriers
within 30...1000 MHz bandwidth,
in broadcast quality.*

BLANKOM HDC-5004 is a 5th generation IP to QAM modulator with multiplexer and scrambler.

The IPTV input channels can be SPTS or MPTS, unicast or multicast.

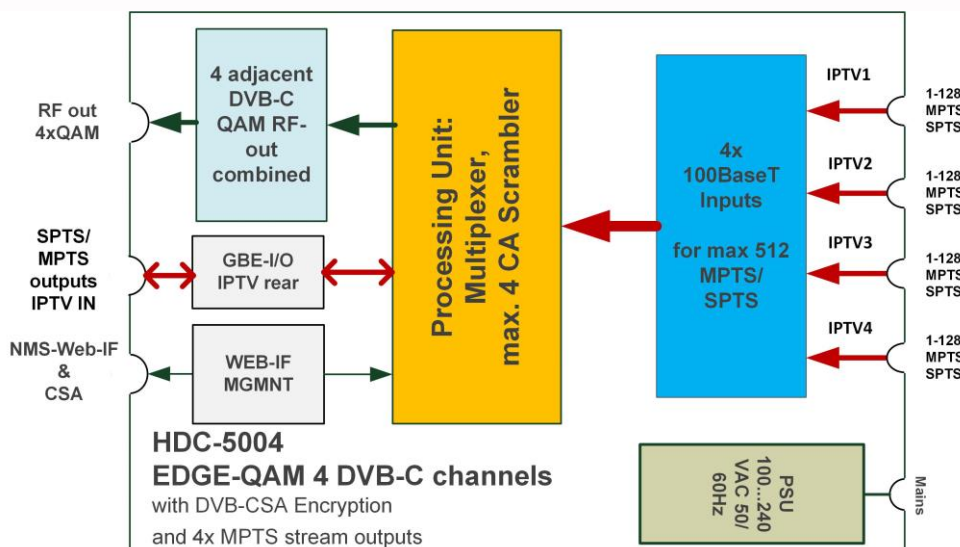
The internal multiplexer creates 4 streams with any combination of content (UHD/HEVC/MPEG4 compatible)

The output consists of 4 DVB-C carriers, each with up to 256QAM modulation.

Each of the 4 output multiplexes are also provided as MPTS IPTV streams, UDP/RTP, unicast or multicast at the IPTV output port.

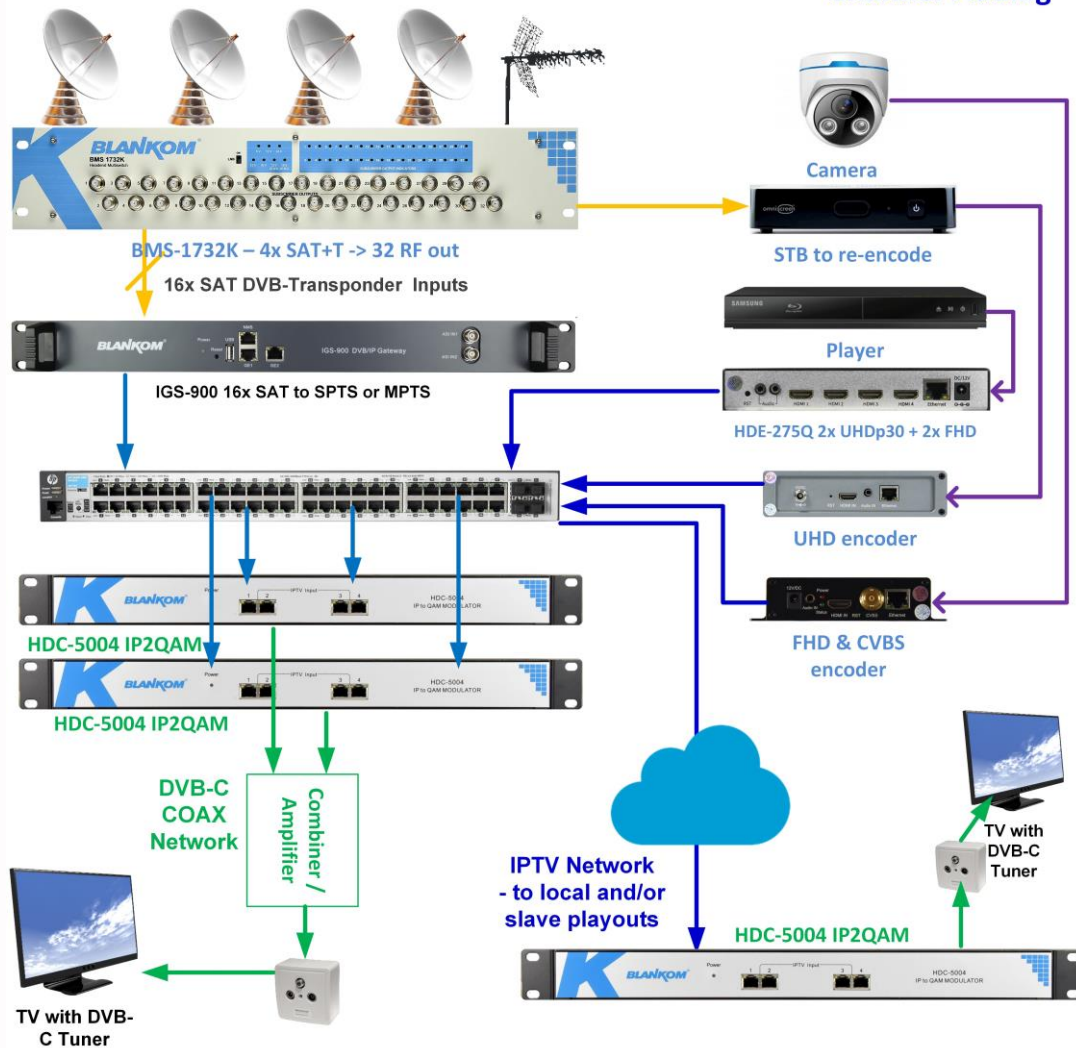
Technical specifications:

Input	Input	512 from 4x IP inputs by 100Mb/s Ethernet Ports
	Transport Protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3
	Transmission Rate	max 84Mbps for each IPTV-1...4 input
Mux	Remapping	Max. 780 PIDs per Channel
	Output Channel	4 adjacent -> 4x IP out as MPTS (from 4 MUX)
	Functions	PID remapping (auto / manually)
		PCR restamping
	PSI/SI table automatically generating NIT,LCN generation and inserting, auto or manual	
Encryption Parameters	Max simulcrypt CA	4
	CA Standard	ETR289, ETSI 101 197, ETSI 103 197
	Connection	Local/remote connection to CAS
Modulation Parameters	QAM Channel	4 adjacent carrier
	Modulation Standard	DVB-C Annex A/C and B EN300 429/ITU-T J.83A/B
	Symbol Rate	5.0...9.0 Msps, 1 kSps steps, FEC
	Constellation	16, 32, 64, 128, 256QAM <i>dep. On A/C or B</i>
	FEC	RS (204, 188) inner/outer configurable
RF Output	Interface	1 F-type output port for 4 QAM channel, 75Ω impedance
	RF Range	30...1000 MHz, 1kHz steps
	Output Level	-10 dBm...+0 dBm (87...107 dBμV), 0.1dB steps
	MER	≥ 40dB
	ACLR	-60 dBc
TS output	4 MPTS IP output over UDP/RTP multicast by 1x100/1000M Gbit-Ethernet Port (@ Rear – IPTV –port)	
System	Network management software (NMS) support (Rear: 100BaseT) and USB port upgrade support	
General	Dimensions	19" 1U: 430mm×180mm×44mm (WxLxH)
	Weight	3kg
	Temperature	0...45°C (operation), -20...80°C (storage)
	Power Supply	AC 100V±10%, 50/60Hz or AC 220V±10%, 50/60Hz
	Consumption	15.4W



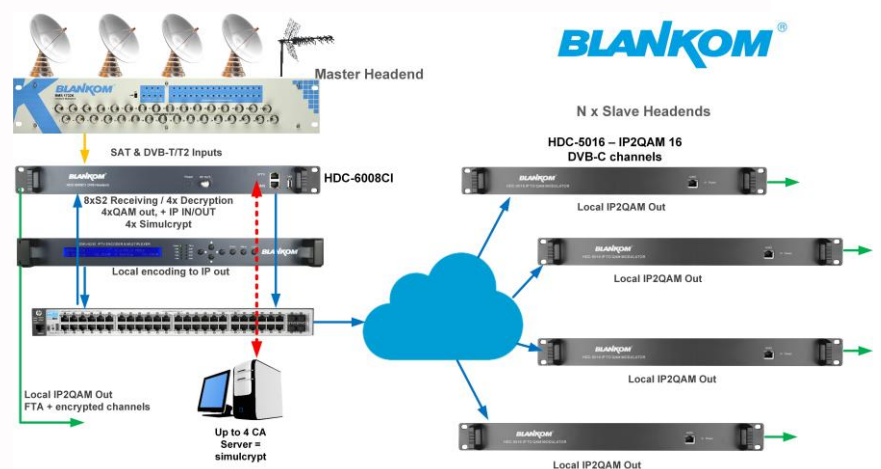


Application example
IPTV and local
content to DVB-C
Channel-Adding



Corresponding Products:

- HDC-5016:
- IP 2 QAM 16 agile ch
- IGS-900:
- 16 SAT-Transponder to IP
- IGS-700:
- 4 SAT/T/C decrypt to IP
- Encoder - Streamer Family:
- EMU's, HDE's, SDE's ...
- New coming 2020:*
- BSS-4504*
- Platform 12 Tr. to IP*



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