

Q924M12A/Q924M32A

DIBVISION | dibsys

Pluggable & Dual Power

24 channels HDMI to 12/32 QAM Encoder Modulator



Q924M32A video platform, digital systems demand powerful, flexible, multipurpose video processing and compact solutions that allow the service provider to support new network architectures.

This 1RU case comes with 6 independent hot-swappable module slots, each module can be configured individually based on the applications including encoding, modulating processing and the combination of all these functions. Built in modulation board, DVB-C (QAM) Modulation, with **12/32 QAM carrier RF** out, Q924M32A can be widely used in Bangladesh, Indonesia, India, Pakistan, Nepal and other countries, for monitoring, training and educating in company, campus, hospital application.

Its pluggable and Hot-swappable module, flexible configuration is making it extremely scalable, reliable with high performance. Q924M32A **FULL HD 1080P@60fps** Encoder, is an efficient, low-cost digital TV headend device, which can be used in public place such as metro, market hall, theatre, hotels, resorts for advertising.

Focusing on benefits

high PCR precision

- audio and video synchronization
- code stream transmitting stably in the network
- smooth and stable video play

Low network jitter and PCR jitter

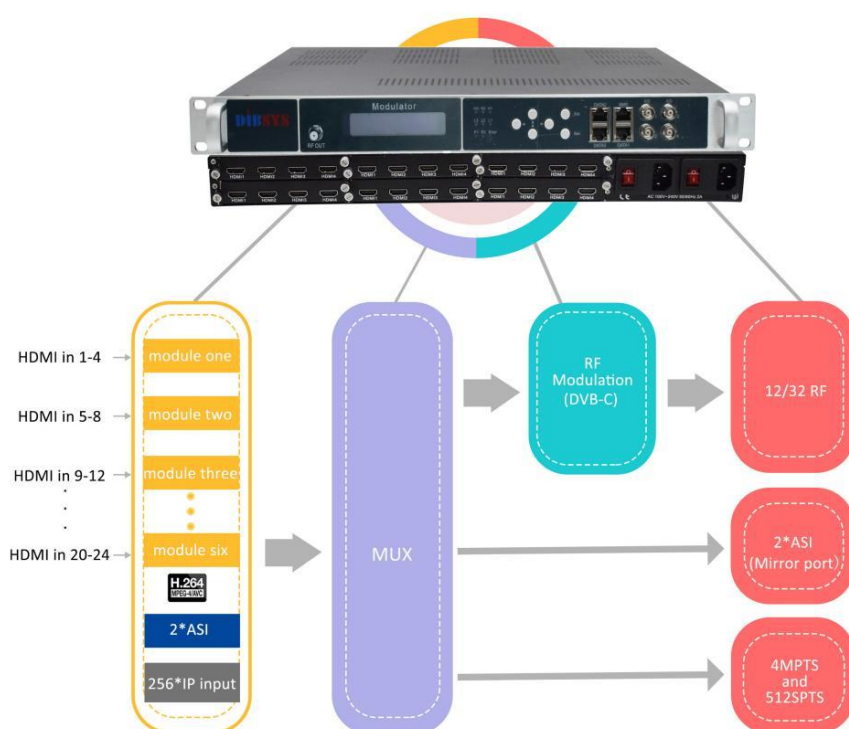
- up to 8*MPTS with null packets
- each MPTS is less than 100Mbps
- can be used in 100Mbps network environment

powerful stream processing capability

- Highly integrated--- ①24 channels HDMI encoding, ②up to 8*MPTS build in MUX, ③512 *SPTS Demux outputs
- Widely used in convert MPTS of DTV to SPTS of IPTV
- PID filtering, re-mapping and PSI/SI rebuilding and editing supported

Key Features

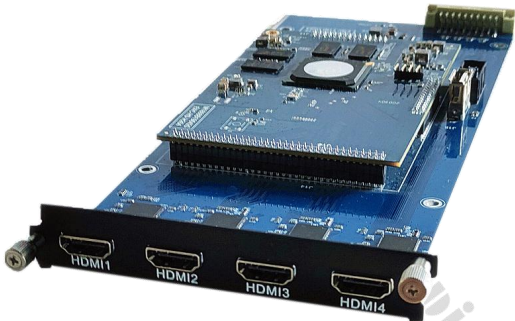
- 6 independent hot-swappable module, 4* HD-MI per module
- flexible encoding&modulating board combination
- DVB-C (QAM) Modulation, 12/32 Carrier RF Out
- H.264 video encoding
- Two separate ASI input for External TS Multiplexing
- Simultaneously 4*MPTS and 512*SPTS over UDP/RTP IP out
- 12/32 separate multiplexing and Up-converter modulating adjacent carrier out
- support multiplexing function: multiplex any input to RF or MPTS output
- Audio encoding: MPEG-1 Layer 2, AAC-LC, AAC-HE v1(SBR), AAC-HE v2(SBR+PS), AC3 optional
- Selectable the Value of PCR PID same as Video PID
- Non adjacent-frequency supported
- Support TTL editing
- PSI/SI editing & inserting
- PID Remapping & Filtering
- Selectable LOGO,QR code,OSD insertion for every, All or Each module of local channel
- Support PCR correct and PCR interval adjusting
- Easy-to-Use System Management via Web
- Redundancy Power Supply
- dual power supply
- Remote WEB reboot supported



TECHNICAL SPECIFICATIONS

Independent hot-swappable module

HD-MI H.264 encode Module



Numbers of Boards 4 HD-MI ports per module
Up to 6 independent hot-swappable module

Encoding Format	H.264	
Resolution	input	output
	1920×1080@60/59.94P	1920×1080@60P, 1280*720@60P 1920×1080@30P, 1280*720@30P
	1920×1080@60i/59.94i	1920×1080@30P, 1280*720@30P
	1920×1080@50P	1920×1080@50P, 1280*720@25P
	1920×1080@50i	1920×1080@25P, 1280*720@25p
	1280×720@60/59.94P	1280×720@60P, 1280*720@30P
	1280×720@50P	1280×720@50P, 1280*720@25P
	720×576@50i	720×576@25P
	720×480@60i	720×480@25P

Numbers of Ports 8; 12; 16; 20; 24 Channels
Encoding format MPEG-4 AVC/H.264

Video Processing

Bit-rate 1Mbps~13Mbps
Rate Control CBR
Select to configure Logo, Caption and QR Coder in any Position of Video Picture (only for HD-MI inputs)

Audio Processing

Encoding MPEG-1 Layer 2
AAC-LC, AAC-HE v1(SBR), AAC-HE v2(SBR+PS)
AC3 optional
Sampling rate 48KHz
Resolution 24-bit
Bit-rate 64kbps, 128Kbps, 192kbps, 224kbps,
256kbps, 320kbps, 384kbps
Audio Gain 0-255

Built in Modulation module

Connector 1 Port, F-Type, 75
Output Return Loss 14 dB
MER ≥40dB
RF output level -35 ~ -5dbm, 1db step
RF frequency 50 ~ 960Mhz, 1KHz step
separate control Frequency difference range (0-40M)
Numbers of RF Channel 12 carrier (Q924M12A), 32 carrier (Q924M32A) optional
Modulation Mode DVB-C

DVB-C Standard J83.A (DVB-C, J83.B, J83.C)

Carrier	ANNEX A	Annex B		Annex C
Constellation (QAM)	16,32,64,128, 256	64	256	64/256
Bandwidth (Mhz)	8	6	6	6
Symbol Rate (Mbaud)	5-7	5.057	5.361	4.2-5.3

Stream Input/Output

DVB-ASI outputs

2 Separate ASI (Select from modulation Channels or MPTS channel)
75Ω, BNC, 188Bytes
MPEG TS over DVB-ASI (EN 50083-9)
1-200Mbps

Total Bitrate

DVB-ASI inputs

Connector 2*BNC female, 75Ω
Number of Input Ports Dual separate ASI ports
Signal Level 200-800mVp-p
Packet Length 188 bytes
Maximum bit-rate per port ≤100Mbps

IP inputs/outputs

Number of port 3*100/1000M GbE Port
2*RJ45 port (input) 128*IP for each port
1*RJ45 port (output) simultaneously 4*MPTS and 512*SPTS
Over UDP/RTP IP out in modulation mode
MPEG TS over UDP, unicast, and multicast streaming
MPEG TS over RTP/RTSP
Configurable packet size(2-7)x188Bytes
Filter Null Packet

Multiplexing

Maximum EIT Remapping 180 input per channel
EIT remapping by automatically or manually
PSI/SI SDT/PMT/TOT/PAT/BAT/CAT/TDT/NIT
Accurate PCR adjusting

System

Local interface LCD + control buttons
Remote management Web/NMS
NMS interface RJ45, 100M
Language English

Environment

Voltage range 100 to 240V AC ; 50/60Hz
Power consumption 60W
Operation Temperature 0 ~ 45℃
Storage Temperature -20 ~ 80℃
Dimensions 482mm (L) * 380mm (W) * 44mm (H)
Weight 4.5 kg

Classic Application

FTA and Encrypted HD to Coaxial TV transmission

