

# QAM-IP-LL Chassis

Low Latency Chassis Upgrade for Thor QAM-IP systems



Ultra Low Latency

Thor QAM-IP chassis model numbers that include “LL” or “ULL” indicate “Low Latency” or “Ultra Low Latency” options as an additional feature. Thor QAM-IP-LL units offer encoded video outputs with latency as low as 70ms. This feature is supported only for 1 or 2 channel HDMI or SDI video inputs on HDMI or BNC connectors. Video input up to 3G-SDI (1080p60) is supported.



SDI



## Features

- MPEG2 & MPEG4 AVC/H.264 HD/SD encoding
- Up to 1920\*1080@50P/60P supported (MPEG4 AVC/H.264)
- Up to 1920\*1080@50I/60I supported (MPEG2 HD)
- 4\* HDMI/SDI input
- 1\*ASI input for re-mux; 1\*RF input for mix
- Simultaneously encoding each channel more than 10Mbps
- 4\* DVB-C RF out (4 carriers combined output)
- Support 4 \* SPTS output
- Extremely low delay
- LCN support (Logical Channel Number)
- Excellent modulation quality MER≥42dB
- RF Frequency range 30Mhz~960Mhz
- LCD display, Remote control and firmware
- Web NMS management; Updates via web
- Lowest cost per channel

## Specifications

### Encoding Video

Encoding	MPEG2, MPEG4 AVC/H.264
Input	1,2, 4 HDMI or SDI
Resolution	1920*1080_60P,1920*1080_50P(MPEG4/H.264 ONLY),1920*1080_60i,1920*1080_50i,1280*720_60p, 1280*720_50P, 720*480_60i, 720*576_50i

### Audio

Encoding	MPEG1, Layer II MPEG2-AAC,MPEG4-AAC
Input	Embedded HDMI or SDI
Bitrates	64kbps, 96kbps, 128kbps, 192kbps, 256kbps, 320kbps

### System

Local Interface	LCD + Control Buttons
Remote Management	Web NMS
Output	ASI out (BNC type); MPTS out
NMS Interface	RJ45, 100M

### General

Power Supply	AC 100 V~240V
Dimensions	482*400*44mm
Weight	4.5 KGS
NMS Interface	0~45°C

### DVB-C Modulator Section

Standard	J.83A , J.83B, J.83C
MER	≥42dB
RF frequency	30~960MHz, 1kHz step -30~-10dbm (81~97 dbps)
RF output level	192kbps,256kbps, 320kbps
J.83A	
Constellation	16/32/64/128/256QAM
Symbol rate	5.000~9.000MSPS adjustable
Bandwidth	8M
J.83B	
Constellation	64QAM/256QAM
Bandwidth	6M
J.83C	
Constellation	64QAM/256QAM
Bandwidth	6M