



## AU-NMD 9000

### Advanced HD/SD H.264 processor

AU-DME 9000 is the professional high scalable, integrated receiver decoder (IRD), Multiple inputs to IP Gateway and MPEG-4 AVC stream processor. Featuring broadcast-quality HD/SD MPEG-2, MPEG-4 AVC (H.264) video decoders, It is ideal for full transport-stream distribution and contribution applications, including DVB scrambling and digital turnaround processing.

AU-DME 9000 supports a rich set of input options, ranging from multiple DVB-S/S2 (QPSK, 8PSK), DVB-C (QAM), DVB- T/T2 (COFDM), ISDB-T, ATSC-T to IP and DVB-ASI, Advanced features and flexibility for IPTV and HDTV Digital Headend Systems IPTV streams can also be received and sent over IP. The platform's native IP interface seamlessly integrates into scalable, low-cost IP networks. It is also a cost-effective IP to SDI/HDMI gateway, Which can distribute and deliver video with HDMI to IP H.264 encoder, it's point to point video application

## Main Features

- TS Descrambler with two integrated DVB-CI slot per chassis, upto decrypt 8 channel per CI module
- I Standard definition MAPEG-2 MP@ML, MPEG-4 AVCMain/High Profile 4.0, 3.0 video decoding
- I MPEG-1 Layer2, HE-AAC(V2), LC-AAC(option) , AC3passthrough audio decoding
- I Selectable multiple inputs Tuners (DVB-S/S2/C/T /T2/ ISDBT/ATSC-T), IP, and ASI
- I Multiple Input to IP and DVB-ASI Mode out: Mux, IP/Tuner/ASIPassthrough
- I Both MPTS and up to 8 SPTS separate IP and Port outputs
- I Two group separate ASI out, Two duplicate ASI per Group
- I Video decoding Monitor LCD in the front panel
- I SD/HD-SDI, HDMI, YPbPr, Composite and R/L analog audio.
  - S-Video, XLR digital audio outputs
  - I Embedded BISS-1 and BISS-E Mode (DSNG-CA)
  - I CC (Closed Caption) supported
  - I EBU SUBTITLE and DVB SUBTITLE supported
  - I With full remultiplexing, capabilities, including PID filtering, remapping and table regeneration
  - I More scalable and lower-cost transition to IP- based services
  - I Resolution: PAL, NTSC, SECAM, 720p,1080i
  - I Aspect Ratio Conversion 16:9, 4:3
  - I FullHigh accuracy PCR correction
  - I Management via SNMP, Local front panel with LCD
  - I Input Single Strength and Quality self-detection
  - I Easy-to-Use System Management

## Application

- I Digital headend system
- I Point to Point IP long distance transmission.
- I Lower-cost transition to IP-based services
- I Contribution and Distribution

## TECHNICAL SPECIFICATIONS

### RF input interfaces

DVB-S/S2 input Level	frequency range: 950~2150MHz -25~-65dBm
Connector	Ftype, 75ohm
Symbol rate	1~45MBauds
LNBP power	13VDC, 18VDC
Demodulation Mode	QPSK, 8PSK
Frequency Stepping	500KHz
DVB-C input	Frequency Range: 47~862MHz
Symbol rate	4~7.0MBauds
Input Level	-15~-20dBmV
Demodulation Mode	16/32/64/128/256QAM/J.83A/B/C (Optional)
DVB-T input	Frequency Range: 146~862MHz
Bandwidth	8MHz(6,7MHz Optional)
Level	-87~-20dBm
Constellations	QPSK, 16QAM, 64QAM
FEC Demodulation	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T2 input	Frequency Range: 44-1002MHz
Bandwidth	8MHz(6,7MHz Optional)
ISDB-T input	Frequency Range: 153MHz~862MHz
Bandwidth	6/7/8MHz
ATSC-T input	Frequency Range: 54MHz~858MHz
Bandwidth	6MHz

### TS in/output interfaces

ASI	1x ASI input 4x ASI outputs, 2 group ASI separate, 2 duplicate ASI per group outputs 75 ohm ?100Mbps Max transport rate @ 85Mbps De-multiplex and re-multiplex transport stream Addressing Multicast/unicast Connectors 100M Base-T, RJ45 Encapsulation Protocols MPEG-TS over UDP/RTP DVB Mode: The IP stream will include all the programs and will be sent to the specified multicast or unicast IP address. IPTV Mode: The input transport stream is demuxed into individual programs, each in a different IP stream. Upto 8 IPTV addresses may be set
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### Video decode output

Interfaces	1x HDMI, HDMI 1.3 interface 1x HD/SD-SDI, BNC 1x YPbPr, BNC 1x Composite, BNC 1x S-Video Front Panel LCD video Monitoring
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Video Formats	1080i @ 50, 60, 59.94 720p, 576i, 480i
Analog video outputs	PAL, NTSC, SECAM
Decoding Format	MPEG-2 SD4: 2:0MP@ML MPEG-4 AVC SDMP@L3 MPEG-4 AVC HDMP@L4.0/HP@4.0
Video processing	Aspect Ratio Conversion 16:9, 4:3, Full Turn on/off the subtitle

### Audio decode output interfaces

Audiomode	1x Pair R/L Analog audio, BNC 1x Pair R/L Digital audio, XLR stereo, left and right
Volume	0~25 Front Panel LCD Audio Monitoring

### Conditional access

Scrambling algorithm	Two PCMCIA Interface DVB-CSA Upto 8 program descrambling simultaneously
SCS interface	ISO7816
Max bitrate	?80Mbps

### Re-multiplexing

Full or any program through multiplexing  
PID Filter, Remapping, Passthrough  
Video Formats 1080i @ 29.97, 30, 25 fps  
720p @ 59.94, 50, 60fps  
480i @ 29.97 fps  
576i @ 25 fps  
480p @ 59.94 fps

### Management

7keys	100M Base-T Ethernet, RJ45, SNMP UP, DOWNLEFT, RIGHT, ENTER, ESC, LOCK Front-Panel KEY Board with LCD LED indicator light
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### Environment

Power consumption	Comply to GB13837-92 & GB8898-88 standard 20W
Power Supply	AC 90-250V/50/60Hz
Operating temperature	-10~50°C
Storage temperature	-10~75°C
Size	1RU: 483mm(L) * 280mm(W) * 44mm(H)
Weight	3.5kg

