

GN-1858

8-Ch MPEG-2/ MPEG-4 AVC SD Encoder



Product Overview

Gospell's GN-1858 is a new generation, cost-effective MPEG-2 and MPEG-4 AVC SD encoder with broadcast-quality. It's ideal for broadcasters, cable network operators and media providers looking to reduce equipment costs for digital television distribution application.

GN-1858 features a high density and flexible configuration, provides up to eight channels of analog or digital audio/video input, MPEG-2 & MPEG-4 AVC SD video encoding and MPEG-1 Layer II/AAC-LC(optional) audio encoding, TS-over-UDP/RTP and DVB-ASI multiplexing outputs. GN-1858 supports Web and SNMP management for local and remote management and maintenance, which can greatly reduce the management time, as well as enabling lower operating expenditure (OPEX) for operators.

Main Features

- Up to eight channels of MPEG-2/MPEG-4 AVC SD encoding in an 1U chassis
- MPEG-1 Layer II or AAC-LC(license option) audio encoding
- Up to eight channels of analog composite video and audio pairs inputs or digital SDI video with embedded audio inputs
- High picture quality in ultra low bit rate to reduce network overheads or costs
- Web browser GUI and SNMP interface for remote management and control
- MPEG TS-over-UDP/RTP output, supporting MPTS/SPTS mode
- Supports dual DVB-ASI inputs and outputs
- MPEG-2 encoding rate range from 0.5 to 5.5Mbps each video
- MPEG-4 AVC encoding rate range from 0.25Mbps to 5.5Mbps each video
- Supports multiple PAL and NTSC SD video encoding resolutions
- VBR/CBR video encoding
- Supports TS multiplex with auto-generated PSI/SI
- Front panel control and LCD display

Technical Specifications

Video/Audio Input (Hardware Option)

Analog Video/Audio Input Option*

Composite Video	Up to 8 x CVBS
	BNC female, 75Ω
Unbalanced Audio	Up to 8 x Stereo pairs (R&L)
	BNC female, 600Ω
	Stereo or Mono mode

Digital Video/Audio Input Option*

Serial Digital Interface	Up to 8 x SD-SDI
	BNC female, 75Ω
	SMPTE 259M
	Embedded Audio

Notes:

Analog input option and digital input option is alternative, not available simultaneously.

ASI Input

Number of ASI Input	2 x ASI Input
Input Mode	Independent Input
Connector	BNC female, 75Ω
TS Packet Length	188 or 204 Bytes
Effective Input Rate	60Mbps (maximum)
Burst TS	Not support

ASI Output

Number of ASI Output	2 x ASI Output
Output Mode	Duplicate outputs
Connector	BNC female, 75Ω
TS Packet Length	188 Bytes
TS Output Bit Rate	2 to 60Mbps
ASI Processing	Re-multiplexing, PAT, PMT Insertion

MPEG TS Over IP Output*

Number of IP Output	1 x 10/100 Base-T Ethernet
MPEG TS Format	7 x 188Byte
IP Encapsulation	MPEG TS-over-UDP/RTP
MPEG TS Mode	MPTS or SPTS
Number of TS Output	8 TS
Addressing	Unicast or Multicast
Connector	RJ-45

Notes:

1) TS-over-IP output and ASI outputs will be available simultaneously in MPTS mode; TS-over-IP output will be available but ASI outputs will be not available in SPTS mode;

Video Encoding

Encoding Formats	MPEG-2: MP@ML MPEG-4 AVC: MP@L3
Resolution and Frame Rate	720/704/640/544/352 x 576i@25fps, 720/704/640/544/352 x 480i@29.97fps

Aspect Ratio	1:1, 4:3, 16:9
Encoding Rate Mode	CBR, VBR
Video Control	Brightness, Contrast, Chrominance and Hue
Video Encoding Rate	MPEG-2: 0.5 to 5.5Mbps per program MPEG-4 AVC: 0.25 to 5.5Mbps per program

Audio Encoding (License Option)

Encoding Standards	MPEG-1 Layer 2 (default) AAC-LC (optional)
Operation Mode	Stereo or Mono
Volume Control	-63dB to +20dB
Sample Rate	32 kHz, 44.1 kHz, 48 kHz
Audio Encoding Rate	MPEG-1 Layer II: 192/224/256/320/384 kbps Optional AAC: 96/112/128/160/192/ 224/ 256/320 kbps

Network Management

Interface	1 x 10/100 Base-T Ethernet
Connector	RJ-45
Management	Web browser and SNMP management

Miscellaneous

Front Panel	3.5" LCD with 6 x Control Button for 2-lines information display and settings 3 x Dual color LED, for status indications of power, working and Alarm 1 x 3-Pin Receptacle(AC Input)
Rear Panel	1 x Power switch 1 x Serial Console Port(via RJ-45 connector)

Power Supply

Input Voltage	90 - 240 VAC, 50/60Hz
Power Consumption	30W (Maximum)

Environmental

Operating Temperature	0°C to 45°C(32°F to 113°F)
Storage Temperature	-20 to 80°C(-4°F to 176°F)
Operating Humidity	90%, non-condensing

Mechanical

Product Dimensions (W x H x D)	483mm x 44.5mm x 400mm 19" x 1.73" (1 RU) x 15.8"
Product Weight	5Kg (11 lbs)

Rear Panel View (Sample Config.)



GN-1858-A Rear Panel



GN-1858-D Rear Panel

Ordering Information

Hardware Options

Hardware Codes	Descriptions
GN-1858-2A	2-Ch MPGE-2/MPEG-4 AVC SD Encoder with 2 x CVBS input, 2 x Unbalanced Stereo Pairs input(R&L)
GN-1858-4A	4-Ch MPGE-2/MPEG-4 AVC SD Encoder with 4 x CVBS input, 4 x Unbalanced Stereo Pairs input(R&L)
GN-1858-6A	4-Ch MPGE-2/MPEG-4 AVC SD Encoder with 6 x CVBS input, 6 x Unbalanced Stereo Pairs input(R&L)
GN-1858-8A	8-Ch MPGE-2/MPEG-4 AVC SD Encoder with 8 x CVBS input, 8 x Unbalanced Stereo Pairs input(R&L)
GN-1858-2D	2-Ch MPGE-2/MPEG-4 AVC SD Encoder with 2 x SDI input
GN-1858-4D	4-Ch MPGE-2/MPEG-4 AVC SD Encoder with 4 x SDI input
GN-1858-6D	6-Ch MPGE-2/MPEG-4 AVC SD Encoder with 6 x SDI input
GN-1858-8D	8-Ch MPGE-2/MPEG-4 AVC SD Encoder with 8 x SDI input

Remarks: Only one IP output interface is available.

License Option

License Codes	Descriptions
LC-1858-2AAC	Enable two channels of AAC stereo encoding
LC-1858-4AAC	Enable four channels of AAC stereo encoding
LC-1858-6AAC	Enable six channels of AAC stereo encoding
LC-1858-8AAC	Enable eight channels of AAC stereo encoding

For More Information

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