



PD1000 High Definition Dense Encoder Modulation System

DESCRIPTION

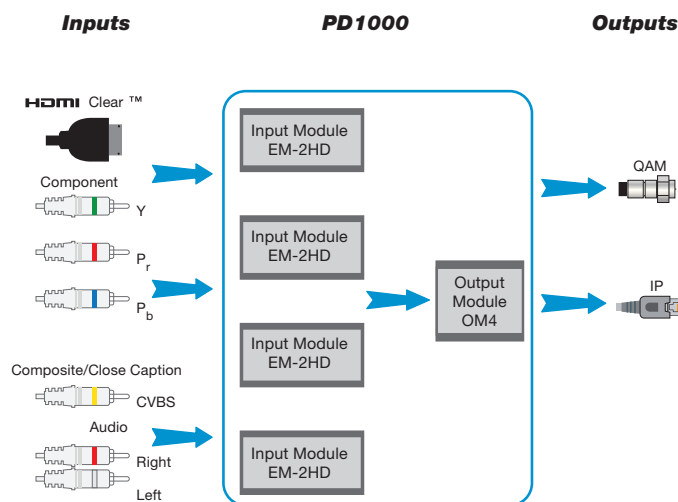
The professional-grade PD1000 HD encoder series allows the user to encode both HD and SD signals in MPEG2 or H.264 formats all in a single rack space. The HD encoder supports real time encoding while giving the flexibility of two, four, six, or eight encoder inputs in HDMI (in the clear), component, and composite (closed captioning). The HD encoder offers simultaneous QAM and IP outputs.

The PD1000 HD encoder series also has the ability for remotely controlled access and monitoring as well as virtual channel mapping. In addition, Dolby® Digital audio encoding is supported. Ideal uses for the HD encoder include commercial residential properties, academic and medical facilities, local area network applications for both CATV and broadcast as well as the hospitality industries.

FEATURES

- Platform based encoder with up to four field hardware upgradeable dual channel encoder modules
- Software upgradeable for future proof feature upgrades
- Supports 480i to 1080p real time encoding and up to 8 HD video channels in MPEG-2 or H.264 formats in 1RU
- MPEG audio encoding plus optional Dolby® Digital Stereo Creator
- Output resolution same as input resolution
- Inputs per dual encoder module - component, HDMI (clear), and composite/closed caption
- Integrated support for Emergency Alert System (EAS)
- Automatic detection of input type and format
- Outputs four consecutive QAM channels
- IP output – Unicast/Multicast, UDP/IP, SPTS
- Simultaneous QAM/IP output
- PSIP tables allow user to configure virtual channel map for each channel
- High output power with 60 dbmV Max. pre-combined
- Secure management and configuration via easy to use web browser
- External DC backup power supply

APPLICATIONS



IMAGES



Fully Loaded
8 Channel H.264/MPEG2 HD/SD Encoder



EM-2HD
MPEG-2 or H.264 Dual HD Encoder Module



OM4
QAM Output Module



EM-HAR
Component Cables

SPECIFICATIONS
AUDIO/VIDEO INPUTS (per encoder module)

HDMI	Dual Type A v1.4 (Clear)
Component	Dual YPrPb, (RCA)
Audio	Dual Stereo (RCA)
Composite/Closed Caption	Dual CVBS (RCA)

VIDEO FORMATS

In/Out Line Rates	1080p/1080i/720p/480p/576i/480i
Frame Rates	25/29.97/30/50/59.94/60

VIDEO/ AUDIO COMPRESSION

Video Codecs	HD and SD MPEG-2/H.264
Audio Codecs	Layer II, Dolby® Digital Stereo Creator

QAM/RF OUTPUT

Frequency Range	50 to 1002 MHz
RF Channel Count	4
Modulation Modes	QAM 64/256
QAM Type	Annex A/B
MER	> 40 dB
RF Level (pre-combined)	>60 dBmV
RF Level Adjustment Range (combined)	38 to 53 dBmV
Spurious	> 60 dBc
I/Q Amplitude Imbalance	< 1%
I/Q Phase Error	< 1°
Frequency Accuracy	± 100 Hertz
Phase Noise	100 dBc @ 10Khz offset
Amplitude Flatness	± 0.25 dB (over 24 MHz bandwidth)
Output Connector	F-Female, 75Ω

IP OUTPUT (optional)

Connection	RJ45, GbE, Full Duplex, Auto-Neg
Addressing	Unicast, Multicast
Transport Protocol	UDP/IP
Transport Format	SPTS

MANAGEMENT

Connection	RJ-45, GbE, Full Duplex, Auto-Neg
Protocols	HTTP
User Interface	Web Browser
Browser Support	IE9 or later, Firefox and Chrome

EAS INPUTS

Video	CVBS (RCA)
Audio	Stereo (RCA)
Trigger	Terminals

INTERNAL AC POWER SUPPLY

Line Voltage	93-254 VAC, 47-63 Hz
Power Consumption	up to 130 Watts

EXTERNAL DC POWER BACKUP

Voltage	+12 VDC ±5 % VAC
Current	< 10 Amps
Operating Temperature	0- 50° C

CERTIFICATIONS




 Dolby® Digital Stereo Creator

GENERAL

Dimensions	19"(L) x 16"(D) x 1.75"(H)
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ORDERING INFORMATION

PD1000	Universal Digital Platform Chassis ⁽¹⁾
PD1000-2	2 Channel H.264/MPEG2 HD/SD Encoder ⁽²⁾ HDMI/Component Input to multiplexed 4xQAM.
PD1000-4	4 Channel H.264/MPEG2 HD/SD Encoder ⁽²⁾ HDMI/Component Input to multiplexed 4xQAM.
PD1000-6	6 Channel H.264/MPEG2 HD/SD Encoder ⁽²⁾ HDMI/Component Input to multiplexed 4xQAM.
PD1000-8	8 Channel H.264/MPEG2 HD/SD Encoder ⁽²⁾ HDMI/Component Input to multiplexed 4xQAM.
EM-2HD	MPEG-2 or H.264 Dual HD Encoder Module for PD1000 (Cables Included)
EM-2HD/D	EM-2HD Includes Dolby® Digital Stereo Creator - optional
EM-HD-SDI	HD-SDI Input – Available 2014
OM4	QAM Output Module for PD1000
OM4-IP	IP Output Option for OM4 - optional
X-PS	External Redundant Power Supply
EM-2HD-WMR	EM-2HD With Watermarking Option – Available 2014
OM2	OFDM Output Module for PD1000 – Available 2014

NOTES:

(1) The PD1000 platform requires one OM4 output module and 1 to 4 EM-2HD dual encoder modules.

(2) IP/Dolby options available.