



Blonder
Tongue

MPHDE-50
Media Player & HD Encoder

SOLUTIONS FOR ALL YOUR APPLICATIONS

The **MPHDE-50** is a conveniently integrated Network Media Player and HD Single Channel Encoder in a single 1RU chassis. The MPEG-2 HD Encoder will encode the output of the Media Player via HDMI (unencrypted) supporting resolutions up to 1080i and output IP and/or QAM RF, and can be configured using any standard Web browser via front-panel 100/1000 Base-T Ethernet connection. The Media Player comes equipped with an EasyPlay feature, allowing for quick setup and playout of content from a FAT32 formatted USB drive.

Powering is available with either 100-240 VAC, or -48 VDC commonly used in CATV headends requiring uninterrupted system operation.

This **MPHDE-50** was specifically designed to provide System Operators with a complete packaged solution for delivering and managing custom HD video content for a variety of applications, including hotels, schools, universities, government and health care facilities. Operators can effectively utilize this product for displaying local advertisements, channel greetings, local area points of interests, daily/weekly activity schedules, and even transportation routes with their channel lineup distribution.



Unit Shown:
Stock#6385B 48

Features

Media Player Section:

- Enhanced bit rate for 1080i output
- Android-based Operating System
- Networked controlled API
- Supports remote management & control
- API for native applications
- 8 GB Flash internal memory
- SD Card port for additional storage/memory

Signage Key Points:

- Video Playback: MPEG-2 and MPEG-4 (H.264)
- Image File Playback: PNG and JPEG
- Calendar and Clock
- RSS News / Twitter Feed
- Web Page Integration

Encoder Section:

- Simultaneously delivers the following outputs: 1xQAM, 1xASI, and 1xIP
- Provides +40 dBmV QAM RF output levels
- Full QAM output channel coverage from 5-1002 (sub-band T7 - 158)
- Provides comprehensive GUI-based monitoring and control via standard Web browsers
- Supports Real-time Dolby® Digital audio encoding
- Supports user-defined PSIP configuration
- Supports Closed Captioning EIA-608 and EIA-708
- Available in 100-240 VAC or -48 VDC powering (model-dependent)

Ordering Information

Model	Stock #	Description
MPHDE-50	6385B	Media Player / HD Encoder, 100-240 VAC Power
	6385B 48	Media Player / HD Encoder, -48 VDC

Made in U.S.A.

Rev: 050817
Blonder Tongue is ISO 9001:2015 Certified

Specifications

Input

Component	Connectors: 3x RCA for Video (Y, Pb, Pr) Video Resolution: 480i, 720p, & 1080i Video Aspect Ratio: 4:3 & 16:9 Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
HD-SDI	Connector: 1x BNC Standard: SMPTE 292M Video Resolution: 480i, 720p, & 1080i Audio: Embedded PCM and pass-through Dolby® Digital only
HDMI (Media Player Input)	Connector: 1x HDMI Video Resolution: 480i, 720p, & 1080i HDCP Encryption: Not supported Audio: Embedded PCM and pass-through Dolby® Digital only
VGA	Connectors: 2x Female VGA (Input + Loop-through Output) Video Resolution: 640x480 @ 60 fps 800x600 @ 60 fps 1024x768 @ 60 fps Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
Composite Video	Connectors: 1x RCA for Video (Y) Video Resolution: 480i Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)

Encoding Profile	
Video	Output Format: MPEG-2 HD MP@ML; ISO 13818-2 Chroma: 4:2:0 Resolution: 480i, 720p, & 1080i Frame rate: 29.97 fps (480i); 29.97 fps (1080i); 59.97 fps (720p) Aspect Ratio: 4:3 & 16:9 GOP Structure: I & P frames (user-selectable) Transport Rate: Variable (user-selectable) Video Bit Rate: Variable (user-selectable) Video Pre-filter: Variable (user-selectable) Color Space: YCbCr and RGB
Audio	Output Format: Dolby® Digital Sampling rate: 48 kHz Bit rate: Variable; 96-448 Kbps (user-selectable)
Closed Captioning	Component: EIA-608; 1x RCA (CC) HD-SDI: EIA-708; Embedded in HD-SDI input HDMI: EIA-608; 1x RCA (CC) VGA: EIA-608; 1x RCA (CC) Composite: EIA-608

General

Dimensions (W x D x H):	19.0 x 14.0 x 1.75 inches (483 x 356 x 45 mm)
Power:	100-240 VAC; 0.80A; 50/60 Hz (stk# 6385B) or - 48 VDC; 0.65A (stk# 6385B 48)
Power Dissipation:	30 W
Weight:	10 lbs (4.54 kg)
Operating Temperature:	32 to 104 °F (0 to 40 °C)
Storage Humidity:	5 to 85% RH @ 40 °C max, non-condensing

Dolby® is a registered trademark of Dolby Laboratories.

Output

QAM	Connector: 1x "F" Female (rear panel) Modulation: QAM 16, 32, 64, 128, and 256 Standards: ITU-T J.83; Annex A and B DVB Symbol Rate: Variable; up to 7 MSymbol/sec (Mbaud) Frequency Range: 5 to 1002 MHz Tuning: CATV Channel Selectable (CH. T7 to 158) Channel Bandwidth: 6 MHz RF Level: +40 dBmV ± 1 dB (4 channels combined) RF Level Adjustment Range: +35 to +42 dBmV, 1 dB increment Frequency Tolerance: ± 0.5 kHz @ 77 °F (25 °C) Frequency Stability: ± 5 kHz over 32 to 122 °F (0 to 50 °C) Amplitude Flatness: ± 0.25 dB (over 6 MHz channel) Phase Noise: -98 dBc (@ 10 kHz) Spurious: -60 dBc Broadband Noise: -70 dBc (@ +40 dBmV output level, 5.5 MHz bandwidth) Impedance: 75 Ω Spectral Inversion: Auto Recognition Carrier Suppression: 45 dB Return Loss: 14 dB typical Signal-to-Noise Ratio (SNR): 40 dB typical MER: 40 dB typical I/Q Phase Error: Less than 1 degree I/Q Amplitude Imbalance: Less than 1%
ASI	Connector: 1x BNC (front-panel) Format: DVB-ASI Standard: ETSI EN 50083-9
IP	Connector: 1x RJ45 (front-panel) Format: 100/1000Base-T Ethernet Standard: Supported (user-selectable)

Media Player Specifications

Input/Output

Video Input:	(1x) Ethernet 10/100 BASE-T
Video Output:	(2x) USB 2.0 High Speed
Audio Output:	HDMI (full HD 1080p with audio) 3.5mm (part of Composite Analog Output)

Internal Storage:	8 GB Flash Memory (Approx. 360 minutes of 720p video @ 3.0 mbps) SD Card Slot for Memory Expansion up to 32GB SD/SDHC Card
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Files Supported

Image Files:	JPEG (480p baseline, 720p baseline) PNG (480p, 720p)
Video Files:	MPEG-2 (480p, 720p) MPEG-4 / H.264 (480p, 720p, 1080p) VC1 / WMV9 (720p)
Other Media:	RSS Feeds (requires live Internet connectivity) Web Page (requires live Internet connectivity) Twitter® Feed (requires live Internet connectivity)