



DESCRIPTION

The Belar FMHD-1 is a state of the art HD Radio monitor designed to support the needs of today’s broadcaster well into the future. The monitor decodes the HD Radio signal and analog FM signal simultaneously displaying HD Radio status, data, time alignment, and configuration information, as well as total, rds, pilot, L, R, L+R and L-R metering and RF spectrums. The FMHD-1 is a two rack unit with a 640 x 240 wide viewing angle color LCD display and rotary encoder providing a detailed, clean and simple user interface.



The FMHD-1 currently supports monitoring multiple audio streams and simultaneous monitoring of four streams with optional Decoder Expansion Board and additional decoders. The units 8, user assignable, analog audio outputs, and 3 assignable AES-3ID

outputs provide support for a wide variety of broadcast scenarios including multi-casting and Surround Sound.

In addition to an antenna input for monitoring off the air, the FMHD-1 has two high level RF inputs for transmitter site operation. The dual RF inputs allow for monitoring at installations using two transmitters to generate the combined Analog/HD signal.

Older wideband Analog FM monitors out in the field may require pre-filtering in order to remove HD radio sidebands. The FMHD-1 provides two variable bandwidth, high quality filtered analog composite outputs for driving these monitors eliminating interference.

The FMHD-1 has both RJ-45 10/100 Base-T Ethernet and USB computer interfaces. When used in conjunction with the Wizard for Windows software the FMHD-1 can be accessed remotely with various PC graphing and logging functions available. The unit also provides 4 user assignable relay closures and email addresses used to indicate alarm conditions.

Supports Belar’s Automatic Delay Correction Software Module

Specifications are subject to change without prior notice.



BELAR ELECTRONICS LABORATORY, INC.

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FEATURES

- Frequency Agile Antenna and High Level RF Inputs
- RF Spectrum Analysis with Mask and Sideband Power Measurements
- Metering of Analog Total, RDS, Pilot, L, R, L+R, and L-R
- Metering of HD Radio L, R, L+R, L-R Audio
- Support for simultaneous decoding of 4 HD audio streams.
- Time Alignment Graphic Display with Audio Polarity
- Level Alignment Graphic Display Analysis ±20.0dB
- HD Radio Control and Status Information
- HD Radio SIS and PAD Data
- BER (Bit Error Rate) Measurements
- Supports Belar’s Automatic Delay Correction Software Module

SPECIFICATIONS

RF Input
 Antenna Input 87.5 to 108 MHz frequency agile,
 75 , F-Type Connector
 RF Inputs 87.5 to 108 MHz frequency agile,
 1 to 10 Vrms, 50 , BNC Connector

Composite Outputs

Analog (2 buffered) +1.5 Vms @ 100%, 75
 unbalanced, BNC Connector
 Digital (2 buffered) LVDS, 100 ,
 RJ-45 Connector

Audio Outputs

Analog (8 channels assignable) +10 dBm, 600
 balanced, XLR Connector
 AES-3ID (6 channels assignable) 1.0 Vp-p
 75 , BNC Connector
 Headphone (L/R assignable) ¼” phone jack

Computer Interface

USB Port
 Ethernet 10/100 Base-T RJ-45 Connector

Alarms

Relays (4 Assignable) Form C,
 15-pin D Connector

Dimensions 19"x3.5"x14.5" (48.26x8.89x36.83 cm),
 2 EIA Rack Units

Power Requirements 40 Watts, 100-240V, 47 to 63 Hz
 Shipping Weight 15 lbs (6.8 kg)
 Shipping Carton 25"x18"x6" (63.5x45.7x15.2 cm)

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