

FLEXSTAR

HDE-100 Program

Exporter

Harris proudly introduces the FLEXSTAR™ HDE-100 Program Exporter, enabling the next-generation HD Radio™ architecture and setting the stage for implementation of Advanced Application Services including supplemental audio channels. The HDE-100 is one of several new products in the Harris FLEXSTAR product line. The FLEXSTAR product line will provide cost effective, end-to-end solutions for radio's conversion to HD.

The iBiquity HDC codec and data encoding algorithms of the HD Radio system have been moved from the DEXSTAR exciter to the HDE-100. This reorganization of the iBiquity system is the basis for the next generation HD architecture, enabling the injection of Advanced Application Services (AAS) data into the HD bit stream. It also allows stations to move all audio processing back to the studio, setting the stage for implementing a more bandwidth efficient STL.

The HDE-100 Program Exporter is responsible for encoding the stations main program audio and program associated data as well as all Advanced Application Services (AAS) delivered from the FLEXSTAR HDI-100 data importer.

The HDE-100 output is unidirectional UDP on Ethernet at ~300kbps for FM and 900kbps for AM and contains the fully multiplexed HD bitstream ready for modulation by the DEXSTAR or FLEXSTAR HD exciters.

Implementation of the HDE-100 allows for more efficient management of the broadcast chain by moving all audio processing and data generation equipment back to the studio. The HDE-100 is fully compatible with the DEXSTAR exciter when fitted with the Exgine DSP modulator board or DEXSTAR can be converted into an HDE-100 through a simple software upgrade.

Features

- Input interface for main program AES3 audio and program associated data (PAD)
- Interfaces with the HDI-100 data importer for Advanced Application Service data including supplemental audio, PAD and enhanced PAD data
- Ethernet connectivity for simple monitoring and control
- Built-In ePAL™ functionality including; AES3 rate converter, AES3 distribution amp, 44.1 kHz word clock generator and automatic delay-path bypass switching
- AES audio monitor output
- Internal GPS receiver with antenna and 25' cable included
- GPS 10MHz and 1PPS clock outputs for external synch requirements
- GPS antenna input
- Standard 19" EIA 2RU rack-mountable on slide-out chassis



FLEXSTAR HDE-100 Program Exporter Specifications

General

Power Requirements: 115/230 VAC, 50/60Hz, 100 Watts nominal

GPS Antenna Input: TNC, 50 ohms for use with recommended antenna

Clock Outputs: 10MHz (1 ppm, at +7dBm nominal, 50 ohms, BNC); 1 PPS, (1 ppm, TTL level, BNC connector)

AM/FM AES Audio Inputs: XLR-F, 110 ohm, 44.1kHz

DAB AES Audio Inputs: XLR-F, 110 ohm, 44.1kHz

Time Aligned AES Audio Output: (1) XLR-M, 110 ohm, 44.1kHz

HD Output Format: Unidirectional, User Datagram Protocol (UDP) on Ethernet

Output Data Rate:

FM: ~300kbps, does not contain analog FM audio signal

AM: ~900kbps, includes analog and HD data

Comm Ports: (2) DB9, DTE-RS232

USB Port: USB Connector Rev 1.0

Keyboard/Mouse: PS2 compatible

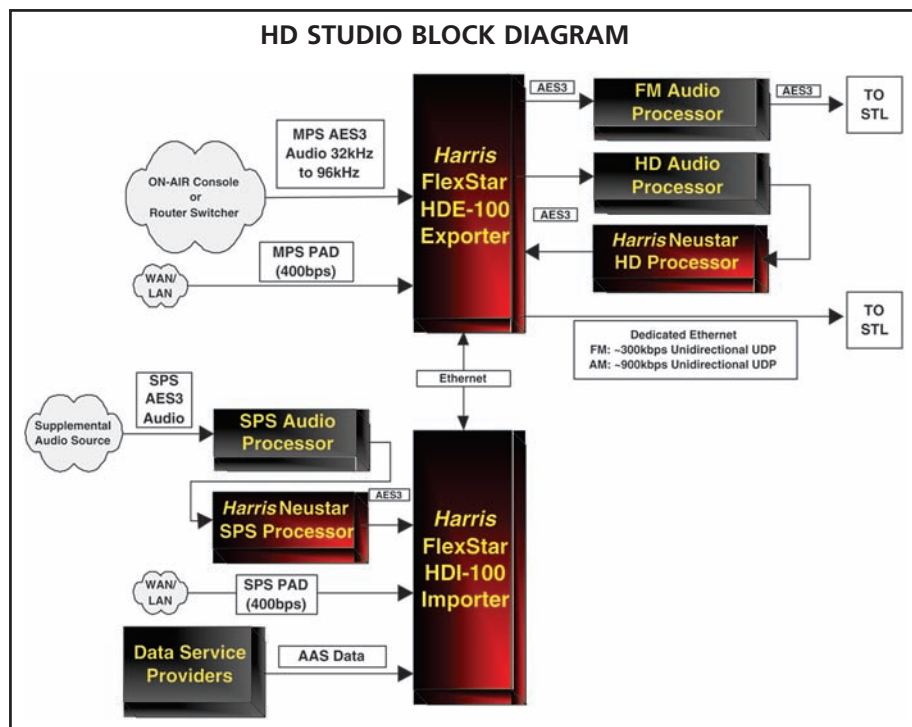
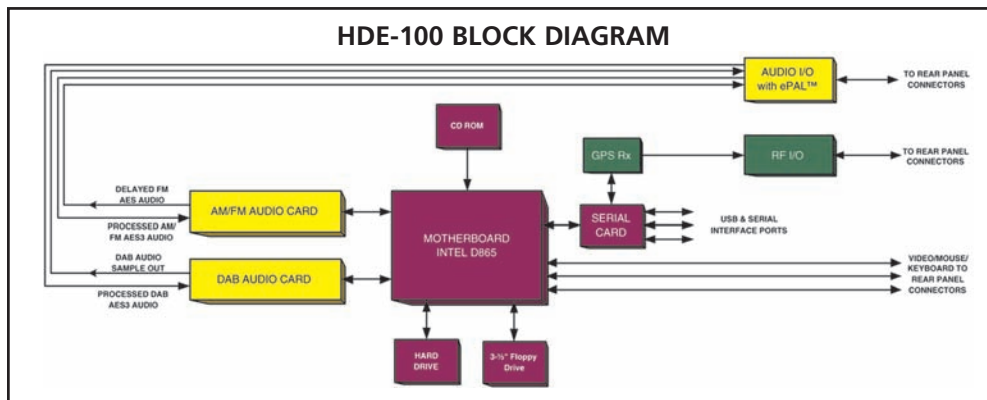
Ethernet: RJ45, 10/100Mbps

Operating Temperature: 0 to 45°C

Operational Relative Humidity: 0 to 90%, non-condensing

Dimensions: 22.4"D x 19"W x 7"H

Weight: 28.5 lbs.



Specifications are subject to change. For a complete listing of the most current specifications, please visit our Website at www.broadcast.harris.com