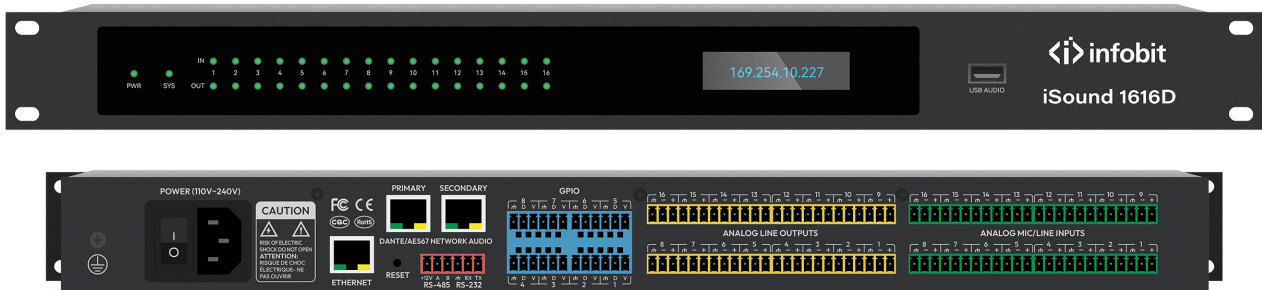


iSound 1616D

16x16 Digital Sound Processor w/ Dante

Datasheet V1.1





Introduction:

INFOBIT's **iSound 1616D** is a Dante enabled, digital audio DSP with Analog I/O. This fully networked professional audio product is ideal complement to INFOBIT's iSwitch Video over IP solutions for House of Worship, Bars and Restaurants, Conferencing, and Education markets. The iSound ecosystem of products are purpose built to deliver pristine audio throughout the network while significantly reducing traditional device count and cabling costs.

The iSound products use the industry-leading ADI 450Mhz SHARC 21489 chip and provides outstanding 24bit/48kHz audio quality. The series has the best 5A DSP algorithms in the industry including:

- AFC (Adaptive Feedback Control)
- AEC (Acoustic Echo Cancellation)
- ANS (Automatic Noise Suppression)
- ANC (Ambient Noise Compensation)
- AGC (Automatic Gain Control)
- Gain Sharing AutoMix

The iSound 1616D is power packed DSP which features 16x16 Dante along with 16x16 Analog I/O. It is perfect for medium to large applications where more analog I/O is needed.

- Applications include:
- Higher Education
- Bar or restaurant
- Large or complex conference rooms

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Features

- ADI SHARC 21489 processor
- 16 balanced microphone or line level inputs on Terminal Block connectors



- 16 balanced line level outputs on Terminal Block connectors
- 2 Dante audio interfaces on RJ-45 connectors
- 8 GPI/O multi-function ports on Terminal Block connectors
- Dante audio channels up to 16×16
- Defnable GUI for managing and configuring multiple units
- All Inputs and Outputs support a full suite of audio shaping tools including graphic and parametric EQ, dynamics, ducker, delay and more
- 16 preset slots to store all configuration data for easy recall
- Built-in USB sound card for recording and playing digital audio
- DSP Configurator software tool for managing all audio operations
- Supports adaptive echo cancellation (AEC), adaptive feedback control (AFC), automatic gain control (AGC), automatic mixture control (AMC), automatic noise suppression (ANS)

Spec

Model	iSound 1616D
Name	16x16 Digital Sound Processor w/ Dante
Audio	
ADSP	ADI SHARC 21489 (×2)
Audio Format	24 bits, 48 kHz sampling rates (uncompressed)
System Latency	< 6 ms
Analog I/O Channels	16×16
Dante I/O Channels	16×16
Analog Input Gain	0, 10, 20, 30, 40, 43 dB
Analog Input Level	+24 dBu
Analog Output Level	+24 dBu
Frequency Response	±0.2 dB (20 Hz to 20 kHz)
THD+N	< 0.003% (1 kHz, +4 dBu)
Common Mode Rejection Ration	80 dB (60 Hz)
SNR	110 dB
Analog Dynamic Range	113 dB
Dante Dynamic Range	115 dB
Analog Background Noise	-89 dBu (A-weighted)
Dante Background Noise	-91 dBu (A-weighted)
Channel Isolation	108 dB (1 kHz)

Input Impedance	9 4k ohms (Balanced)
Output Impedance	102 ohms (Balanced)
Phantom Power	48 V
Interface	
Input Port	16 Analog Audio (Terminal Block)
Output Port	16 Analog Audio (Terminal Block)
Ethernet Port	2 Dante Audio (RJ-45) 1 LAN (RJ-45)
USB Port	1 USB Audio (Type-A)
Serial Port	1 RS-232 (Terminal Block) 1 RS-485 (Terminal Block)
GPI/O Port	8 GPI/O (Terminal Block)
Power	
AC Power	110 to 240 VAC at 50 or 60 Hz
AC Adapter	N/A
Power Consumption	35 W
Enclosure	
Chassis Material	Metal
Chassis Color	Black
Chassis Dimensions (Height×Width×Depth)	45×482×260 mm
Chassis Weight	3 kg
Environment	
Operating Temperature	+32 to +104 °F (0 to +40 °C)
Humidity	10% to 90% RH (non-condensing)
Compliance	
Regulatory Compliance	FCC, CCC, CE, RoHS