

Exelltech DSP ELT1616D TECHNICAL DATA



OVERVIEW

- The **Exelltech ELT1616D** is a versatile digital signal processor based on A-DSP Architecture with 40-bits floating point, capacity up to 400MIPS, 1600MFLOPS, with fixed 16 analog inputs and 16 analog outputs, Dante 16x16 channels, and in-built USB audio channel, which can process both analog and digital signals.
- The ELT1616D has great advantages on its core Algorithms which include AEC (Echo Cancellation), AFC (Feedback Cancellation), ANS (Noise Suppression), AGC (Automatic Gain Control). The Echo Cancellation algorithm can be applied to signals from local analog inputs or remote digital channel, while Automatic Gain Control ensures that microphone levels remain at an optimum level, Noise Suppression removes steady state noise, and Feedback Suppression enables more flexible microphone, loudspeaker placements and speech reinforcement, delivering audio where you want it. The signal processing is fully customizable via DSP control software.
- Multiple DSP devices can be configured and programmed in one PC, which provides the building blocks of the perfectly tailored system solution. USB audio channel allows the processor to take full advantage of today's most sophisticated conferencing solutions, like MS Teams, Google Meet, Google Meet etc.
- The **ELT1616D** features Dante / AES67 audio with 16x16 channels, with primary and secondary ports as redundancy design, control through a separate Ethernet port, additionally it provides extra 8 GPIO multi-function ports.
- Support Ducker, Camera tracking function.
- Internal universal power, 1U rack size.

FEATURES

- 16 Analog Inputs (48 V Phantom Power Option)
- 16 Analog Outputs
- 16x16 Dante Channels compliant with AES67
- In-built USB Audio Channel
- Algorithms: AEC, AFS, ANS, AGC
- Customizable signal processing

- RS232 / RS485 serial port
- 8 GPIO port
- System configuration and control via Ethernet
- 16 Presets for recall
- Internal universal power supply
- Rack Mountable

TECHNICAL SPECIFICATIONS

Analog Inputs	16
Analog Outputs	16
Dante I/O Channels	16x16
Latency	< 6 ms
USB Audio Channel	Yes
Input Gain Range (3dB Steps)	0~48 dB
Maximum Input Level	+18 dBu
Maximum Output Level	+18 dBu
Frequency Response	±0.3 dBu (20 ~ 20 kHz)
THD+N	<0.003% (1 Khz, +4 dBu)
Input dynamic range	110 dB
Output dynamic range	112 dB
Sampling Rate	48 kHz
Audio Format	24-bit
Phantom Power	+48 V (10 mA Max)
Input Impedance (Balanced)	5.4K Ohms
Output Impedance (Balanced)	600 Ohms
Power Consumption	35 W
Temperature	0 ~ 40 °C
Humidity	10% to 90% RH (non-condensing)
Weight	3 kg
Size	482 x 260 x 45 mm