

NEUTRINO

Open-Architecture DSP

XILICA



A winning combination of audio performance, ease of use and cost-efficiency is offered by the popular Neutrino digital signal processors, comprising DCHP-enabled units available in four primary I/O model sizes.

- Product range designed around drag-and-drop simplicity, allowing users the ability to quickly configure the precise DSP system required by a customer
- Features a range of I/O combinations to maximise choice and reduce unnecessary spend, including 8x8, 8x16, 16x8 and 16x6 - all with individual terminal block connections to permit rapid installation
- Available factory-installed option cards include bi-directional Dante networking, AES/EBU digital audio via a DB25 connector, and eight channels of low-latency AEC
- Neutrino products can be controlled and programmed over Ethernet using Xilica's SolaroConsole software, which allows universal programming of Dante-enabled products from manufacturers including Bose, Powersoft, Yamaha and others
- Neutrino connects to a wide range of control interfaces, including: its own browser-based control panel; the SolaroControl iOS and Android app; wired Touch 7 and Mini series wall controls; Logic custom I/O; and third-party control systems such as Crestron and AMX

Engineer's Specification

Model versions shall provide eight (8) or sixteen (16) balanced analog mic/line inputs with 48V switchable Phantom power, alongside eight (8) or sixteen (16) balanced line outputs (models A0808, A0816, A1608, and A1616). Processing is from a 24-bit A/D & D/A converters and 40-bit floating point DSP, with 48kHz sample rate. The front panel shall include a 2x24 backlit LCD display, switch and thumb wheel programming controls, power and network LEDs, and input/output LED level indicators. Audio connections shall be accessed via rear panel 3.5mm individual terminal block connectors. Network audio expansion shall be provided in Neutrino-N models by the Dante™ protocol with a capacity of 32 (16x16) channels. The connector shall be 1000 Base-T RJ45

utilizing CAT6 cable. AEC and AES/EBU audio I/O expansion shall be provided by Neutrino-AEC and Neutrino-D model versions. Available DSP components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers, dynamics/gain controls, routers, room combiners, delays, remote controls, meters, and onboard logic. The processor shall include a 4x2 General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. All program memory shall be non-volatile and provide program security should power fail. The processors shall be ETL marked and comply with UL/CSA/CE safety requirements, FCC emission requirements, and shall be compliant with the RoHS directive. The DSP shall be the Neutrino Series.



Rear panel view of the Neutrino A1616-N Dante-enabled DSP.

Available Model Variants

	Base Model	With Dante	With AES/EBU	With AEC	With Dante & AES/EBU	With Dante & AEC
8x8 I/O	A0808	A0808-N	A0808-D		A0808-ND	
8x16 I/O	A0816	A0816-N				
16x8 I/O	A1608	A1608-N		A1608-AEC		A1608-AEC-N
16x16 I/O	A1616	A1616-N	A1616-D		A1616-ND	

Technical Specifications

Input impedance	>10k Ohms
Output impedance	50 Ohms
Maximum level	+20dBu (mic gain: 0 / +40dB steps)
Input type	Electronically balanced (with individually-switchable 48V Phantom power)
Frequency response	+/- 0.1dB (20 to 20kHz)
Dynamic range	110dB typ (unweighted)
CMMR	> 100db (50 to 10kHz)
Crosstalk	< -100dB
Distortion	0.002% (1kHz @ +4dBu)

Processor	40-bit Floating Point
Sampling rate	48kHz
Analog converters	High-performance 24-bit
Propagation delay	3ms (AEC: 11ms)
Connectors	Phoenix Plug-in 3.5mm (individual), RJ45 (Cat 5), IEC power, DB-25 AES/EBU
Power	90-240 VAC (50-60Hz)
Dimensions	19"x1.75"x9" (483x44x229mm)
Rack mount	1U, with vent between units
Weight	11lbs / 5kg



Customer Support

If you'd like to contact us regarding product support or technical designs, email support@xilica.com and we'll connect you with a solutions engineer. Alternatively, if you'd like to speak to someone, you can call the following numbers for immediate assistance:

North America & Rest of World: +1 905-770-0055

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