DSP/Routers

NEUTRON-NB

Dual Network Bridge Expansion Module with 10 Port AES50 Interface for NEUTRON Audio System Engine

- Dual network bridge expansion module provides conversion between multiple digital audio formats
- Compatible with KLARK TEKNIK KT-AES50, KT-DANTE64, KT-MADI and KT-USB network modules
- Each network bridge port offers up to 64 bidirectional channels
- Bidirectional asynchronous sample rate conversion on every channel
- 10 AES50 port interface provides an additional 240 bidirectional channels
- 24 bit audio operation @ 96 kHz sample rate
- Features Neutrik etherCON* AES50 network ports
- 3-Year Warranty Program*
- Designed and engineered in the U.K.

The NEUTRON-NB Network Bridge expansion module compatible with the MIDAS NEUTRON audio system engine provides a multichannel interface between two third party digital audio networks and point-to-point interfaces. The third party interfaces operate in separate clock domains and are connected by a bidirectional asynchronous sample rate converter (ASRC). This unique KLARK TEKNIK technology allows the interfacing of up to 64 bidirectional channels between the two independently clocked domains, which can also operate at different sample rates.

Compatible with the KLARK TEKNIK KT-AES50, KT-DANTE64, KT-MADI and KT-USB network modules, NEUTRON-NB is future-proofed in the evolving world of digital audio networking technology by being able to support new and emerging protocols via its two industry-standard expansion slots, which are compatible with the Cirrus CM-1* format.

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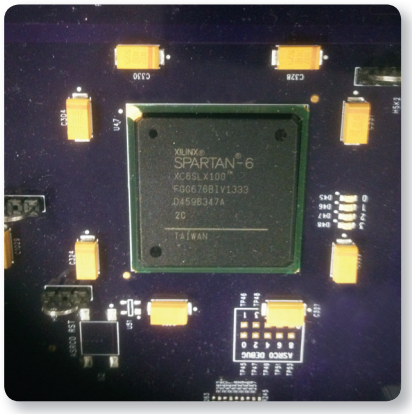

Asynchronous Sample Rate Converter

The multichannel bidirectional Asynchronous Sample Rate Converter (ASRC) allows the two third party domains to function independently. This means that a clock failure or loss of synchronisation in one domain will not affect the operation of the other.

In addition the two third party modules are clocked independently of the main Neutron-NB Module, again preventing a loss of synchronisation in the module affecting the main units operation.

Furthermore, the modules will mute the audio streams when a loss of synchronisation is detected.

Digital Audio Networking

SuperMAC (AES50-Compliant) digital audio networking technology from KLARK TEKNIK simultaneously provides high channel counts, ultra low and deterministic latencies, sample-synchronous and phase-aligned networked clock distribution, error detection and correction, network redundancy, and ease of deployment and use – to meet the demanding requirements of live concert touring.

10 Port AES50 interface

NEUTRON-NB features an 10 port AES50 interface to provide an additional 240 bidirectional channels at 96 kHz sample rate. These AES50 ports can be freely routed to provide further network expansion for the NEUTRON audio system engine. Neutrik etherCON* AES50 connectors are used to ensure reliable connections, night after night.

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You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own MUSIC Group factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous 3-Year Warranty program.

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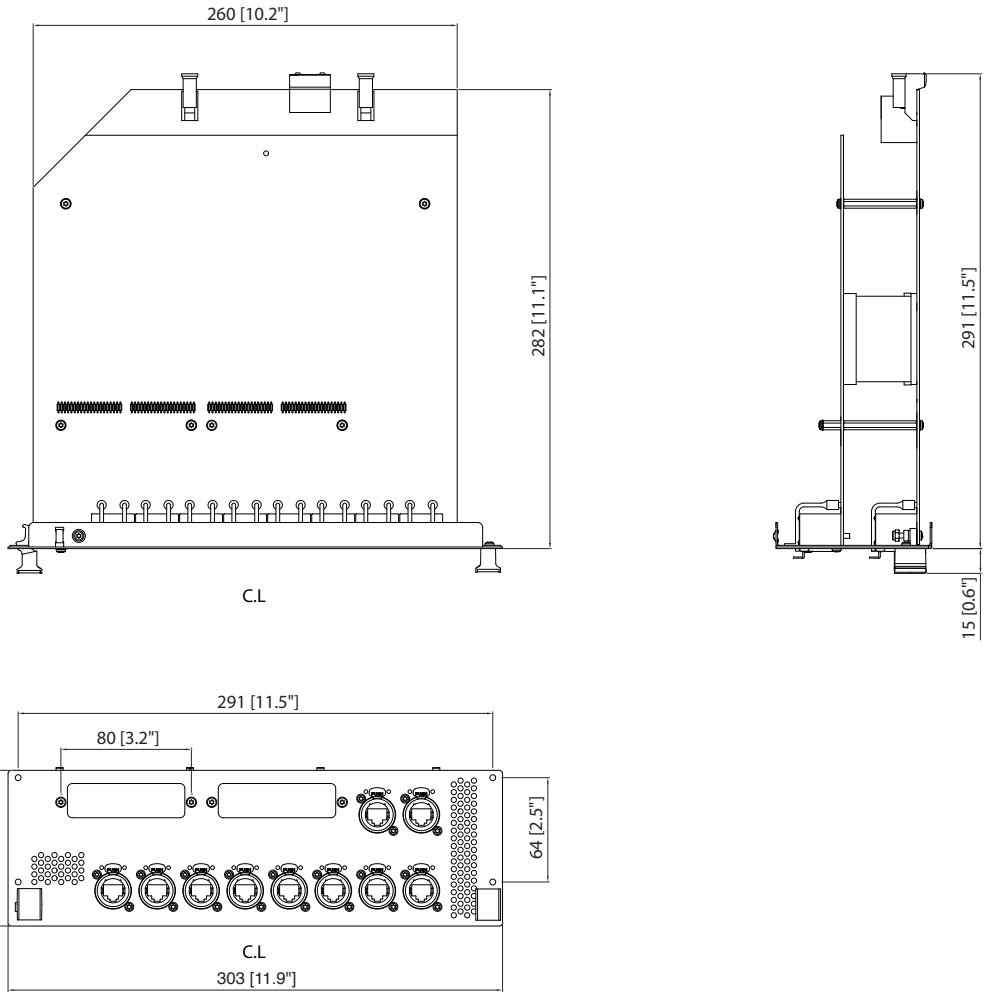
Dimensions



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Technical Specifications

System Specifications

Network Module Expansion Slot	2 providing up to 64 bidirectional channels per slot
Type	Cirrus CM-1 format compatible
Sample Rate	Selectable 48 KHz or 96 kHz
Channels	Up to 64 bidirectional per Slot
AES50 Ports	10
Type	Neutrik etherCON with LED status indication
Sample Rate	96 kHz

Dimensions

Height	96 mm (3.8")
Width	303 mm (11.9")
Depth	306 mm (12.0")

Dimensions

Net	1.3 kg (2.9 lbs)

Options

KLARK TEKNIK KT-AES50	AES50 Network Module with up to 48 Bidirectional Channels
KLARK TEKNIK KT-DANTE64	Audinate Dante Network Module with up to 64 Bidirectional Channels
KLARK TEKNIK KT-MADI	MADI Network Module with up to 64 Bidirectional Channels
KLARK TEKNIK KT-USB	USB 2.0 Network Module with up to 48 Bidirectional Channels

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Architecture & Engineering Specifications

The dual network bridge expansion module shall provide bidirectional asynchronous sample rate conversion of up to 64 simultaneous channels of 24 bit resolution digital audio, between two third party network module interfaces.

The dual network bridge expansion module shall be designed for use in the MIDAS NEUTRON audio system engine.

The dual network bridge expansion module shall have two provision for two expansion slots conforming to the electrical and mechanical specifications of the Cirrus CM-1 format to provide the two KLARK TEKNIK network module interfaces.

The dual network bridge expansion module shall have two clock domains, separated by an asynchronous sample rate converter which shall permit independent operation of the two clock domains whilst providing a birectional 64 channel interface between them.

The dual network bridge expansion module shall support operation at either 96 kHz or 48 kHz sample rates for each network module's external clock domain on an independent basis.

The dual network bridge expansion module shall incorporate an 10 port AES50 interface to provide an additional 240 bidirectional channels at 96 kHz sample rate.

The dual network bridge expansion module shall be 303 mm wide x 306 mm deep x 96 mm high (11.9" x 12.0" x 3.8"), with nominal weight 1.3 kg (2.9 lbs).

The dual network bridge expansion module shall be the MIDAS NEUTRON-NB and no other alternative shall be acceptable.

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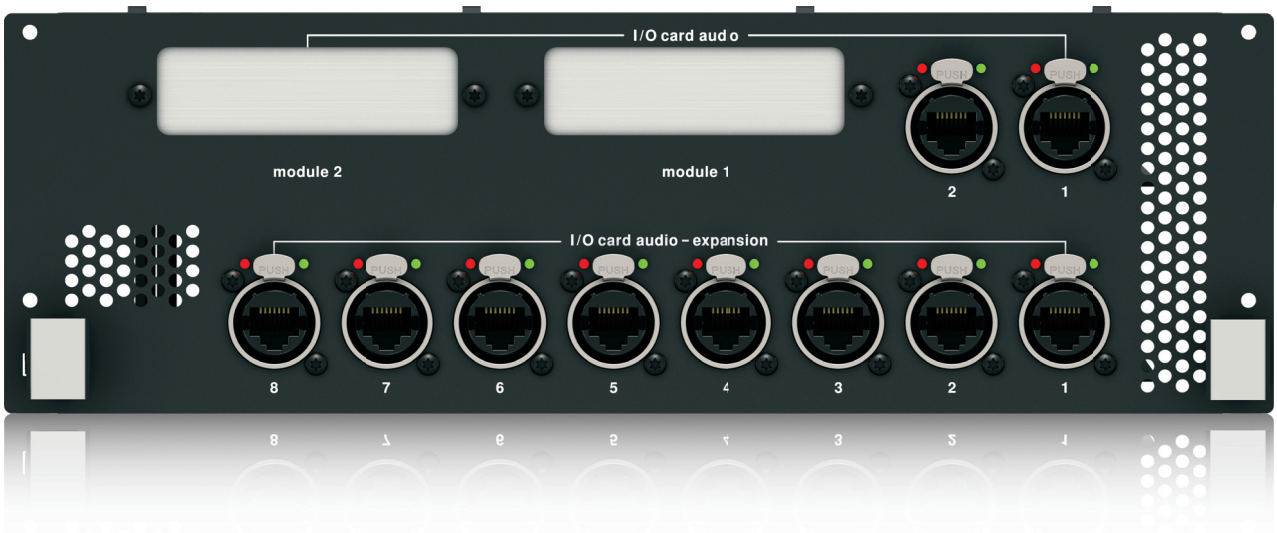

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3 Year Warranty

For service, support or more information contact the MIDAS location nearest you:

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