

XRT

The new reference for routers – 8k on one board



- 8448 sources and 8448 destinations on one NEXUS board
- Ethernet tunneling
- Dynamic task management for fibre-optic connectors
- Realisation of complex audio networks

XRT is part of the fourth generation of NEXUS system fibre-optic boards. For the first time it decouples the audio routing of the fibre-optic interfaces from the Base Device's backplane, increasing its routing capacity.

The capacity of each fibre-optic connector can be distributed dynamically among different tasks. XRT enables routing of both audio data and Ethernet tunnels in the NEXUS fibre-optic network.

XRT constitutes its own router with a minimal space requirement of just one board, and enables the creation of complex and powerful audio networks using NEXUS Base Devices.



NEXUS Digital Audio Routing and Interconnect System

XRT

Overview

SFP interfaces	6 high speed ports: <ul style="list-style-type: none"> 6.25GBit/s for the new NEXUS high speed fibre protocol Supports up to 2048 bidirectional channels* Compatible with NEXUS low speed fibre protocol with up to 512 channels* Compatible with existing NEXUS fibre protocol (XFOC07)
	6 low speed ports: <ul style="list-style-type: none"> 1.25GBit/s for the new NEXUS low speed ports Supports up to 512 bidirectional channels* Compatible with existing NEXUS fibre protocol (XFOC07) 2 ports available for Ethernet devices
Routing	8448 sources to 8448 destinations* on one 3 U board
	No reduction in XRT routing capacity with redundant fibre-optic connections
	Increases a Base Device's routing capacity
	Base Device's audio bus fully available for internal routing
	Supports all NEXUS sample rate frequencies
Network topologies	Consistent development of the NEXUS decentralised concept
	No restrictions when establishing a network: any topology option, from ring, star, mesh to tree
	This allows NEXUS to be optimally adapted to its intended purpose
Ethernet tunnel	2 SFP+ ports can establish a connection to Ethernet devices via: <ul style="list-style-type: none"> 10/100/1000 BASE-T Copper SFP Modules Gigabit Fibre Optic Modules
	Supports an Ethernet tunnel connection on each XRT fibre-optic connection
	Ethernet tunnel connection can be routed between all XRT fibre-optic ports
	Supports redundant switching via NEXUS or the Ethernet switch
	Guaranteed bandwidth for the Ethernet tunnel when audio at full capacity on fibre-optic connection: <ul style="list-style-type: none"> 1GBit/s on high speed fibre 100MBit/s on low speed fibre
	Parity check through signature in connection protocol
	Auto diagnostics: Warning when wrong SFP is inserted
Reliability	Redundancy: <ul style="list-style-type: none"> Fibre redundancy Board redundancy Seamless switching to the redundant connection No reduction in XRT routing capacity with redundant operation
	Temperature monitoring
Mechanics	3 U board for NEXUS
	8 HP faceplate with 12 SFP+ module slots
	One multi-colour LED per port for state signalling
	Passive cooling
	Dimensions (height x length): 355mm x 128mm
	Weight: approx. 1006g

* at 48kHz Sample Rate

08/2014 (C) Stage Tec Entwicklungsgesellschaft für professionelle Audiotechnik GmbH
Errors and omissions excepted.

Stage Tec
Entwicklungsgesellschaft für professionelle Audiotechnik GmbH
Tabbertstraße 10-11
12459 Berlin/Germany
www.stageteq.com



NEXUS Digital Audio Routing and Interconnect System