

SDI video Access Module

High density SDI access for the Nimbra 300 series

MODULE



The 8-port SDI Video Access Module provides a flexible digital video transport solution for a variety of professional video applications.

The 8-port SDI Video Access Module for Nimbra 300 enables digital video transport with guaranteed quality of service in studio, contribution and distribution networks.

The 8-port SDI Video Access Module for the Nimbra 300 series of multi-service switches enables cost-efficient video transport in a networked environment over IP/Ethernet or SDH/SONET.

With up to 16 ports per Nimbra 360/380 chassis and built-in secure multicast, high-density point-to-point or point-to-multipoint distribution of high quality video content is provided for a wide range of professional video applications.

Versatile and flexible transport solution

The SDI Video Access Module transports up to eight independent SDI video streams in secured and tailored logical channels over the Nimbra network, with full switching support over any network topology. Each port may be configured independently as either In or Out to provide flexible multi-directional transport and the monitor port can be configured to monitor any of the signal ports on the board. The SDI Video Access Module is ideal for use in video production, post-production and broadcast environments, for permanent or occasional services.

QoS enhanced transport

Service quality in terms of delay, jitter and wander is guaranteed by allocating network resources end-to-end through automated inbound signalling. The unique non-hierarchical service multiplexing together with the secure channel separation used in the Nimbra network provide a guaranteed quality transport, even at full network utilization.

Unprecedented availability

Availability is a key requirement for all professional video applications. With built-in network restoration and support for per service sub-50ms 1+1 protection, the SDI Video Access Module offers a flexible protection switching solution with multiple levels of protection. Open-ended 1+1 protection adds extra flexibility by allowing two independent sources to terminate on the same output port.

The SDI Video Access Module features extensive ITU-T G.826 fault and performance monitoring and supports both near-end and far-end loopback. The module is hot-swappable and is managed through CLI, Web and SNMP.

KEY FEATURES

8 independent SDI ports.

Each SDI port can be individually configured as In or Out.

Service multiplexing.

With full support for channel multiplexing and switching, each video stream can be transported independently through the Nimbra network, in any traffic pattern.

Guaranteed QoS transport.

Each video stream is transported in bandwidth tailored secure channel with guaranteed QoS properties, independent of network load.

Highest availability.

Supports both network redundancy and sub 50 ms 1+1 protection, including open-ended 1+1 protection.

Multicast support.

The module supports QoS guaranteed multicast transport streams in any fan-out.

Extremely low jitter and wander.

The module utilizes the unique synchronous timing performance of the Nimbra switches in order to deliver transport streams with extremely low jitter and wander.

Performance monitoring.

Standard performance metrics with G.826 style presentation of performance for a consolidated service performance view.

Hot swap.

Supports in-service swapping of the module for high availability.

TECHNICAL SPECIFICATIONS

Form factor: Plug-in unit for Nimbra 300 series, uses 1 slot

Ports: 8 x SDI In or Out, individually configurable, 1 monitor, BNC 75 ohm

Interface:
Standard: SMPTE 259M SD-SDI
SMPTE 305M SD-SDTI
Frequency: 270 Mbps
Input freq toler: ± 40 ppm
Return loss: >17 dB
Reach: Up to 300 m, Belden 1694A

Mapping:
DTM: ETSI ES 201 803-11

Jitter:
PCR:

Fault management:
RX: LOS, LOF, DOF, LOL
TX: AIS, LODS, DUF, DOF

Performance management:
ITU-T G.826 based
Bins: 24h, 15min
Parameters: ES, SES, BBE, UAS

Management:
SNMP: v1/v2c/v3
Element Manager: Web GUI, CLI, Nimbra Vision
Maintenance:
Hardware: Hot-swap
Firmware: Remote upgrade

Power consumption: <20W

Environmental conditions:
Operating temp: 5 to 40 °C (41 to 104 °F)
(short term): -5 to 55 °C (23 to 131 °F)
Storage temp: -40 to 70 °C (-40 to 156 °F)
Relative humid: 10% to 90% (non-condensing)

Regulatory compliance:
Safety: UL60950
EN60950
EMC: FCC Part 15 sub-part B
EN 300 386
CE marking: 93/68/EEC
Environmental: RoHS directive 2002/95/EC

Ordering information:
NPS0048-3001 8 x SDI Video Access Module
(Nimbra 300 series)

Net Insight AB (publ)
Phone +46 (0)8 685 04 00, info@netinsight.net, www.netinsight.net

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