

ASI transport Access Module

High density DVB-ASI access for the Nimbra 300 MSR

MODULE



The 8-port ASI transport Access Module provides a flexible DVB-ASI transport solution for a variety of professional video applications.

The 8-port ASI Transport Access Module for the Nimbra 300 MSR provides high-quality transport of MPEG encoded (DVB-ASI) video with guaranteed QoS.

The ASI Transport Access Module for the Nimbra 300 series of multiservice MSRs enables digital multimedia transport with guaranteed Quality of Service in studio, contribution and distribution networks.

With a unique configurable bandwidth feature, the ASI Transport Module keeps overhead to a minimum and makes optimal use of network resources. Support for native multicast enables cost-efficient video transport both in a networked environment and for point-to-multipoint distribution.

Versatile and flexible transport solution

Independent of the MPEG TS bit rate, the ASI Transport Access Module is ideal for video production, post-production and broadcast environments. It allows MPEG transport streams ranging from 2 to 212 Mbps to be transported, with guaranteed Quality of Service.

Each port can be individually configured as In or Out and one monitor port can monitor any in or out port. Network capacity can easily be configured to fit DVB broadcasting and distribution as well as professional studio to studio contribution.

Service Aware Media Networks

A Nimbra MSR network is unique in its capability of managing and controlling individual media service within the core network without any grouping into service classes - to make the network truly aware of each individual service. Service provisioning, monitoring and protection is configured and performed on individual services and independently of underlying network infrastructure.

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 ASI Transport 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 ASI Transport Access Module features extensive fault and performance monitoring and supports both near-end and far-end loopback. The module is hot-swappable for carrier class availability.

Synchronous performance

The unique time and synchronization functionality of the Nimbra MSR platform ensures industry leading jitter and wander performance.

KEY FEATURES

8 independent ASI ports.

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

Full DVB-ASI range.

Each port can be configured to handle an ASI transport stream of bandwidth 2-212 Mbps .

Highest utilization.

Since only the actual MPEG-2 TS packets are transported, large amounts of infrastructure bandwidth are preserved. The Nimbra non-hierarchical multiplexing and switching further improves link utilization.

Guaranteed QoS transport.

Each transport stream is transported with guaranteed QoS properties, independent of network load. One service never affects another service.

Highest availability.

Supports both network redundancy and sub 50 ms 1+1 protection switching.

Multicast support.

The module supports QoS guaranteed multicast of any-sized 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.

Ease of handling.

Managed by CLI, Web GUI or SNMP, or by Nimbra Vision™ NMS.

TECHNICAL SPECIFICATIONS

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

Ports: 8 x DVB-ASI In or Out, individually configurable, 1 monitor, BNC 75 ohm

Interface:
Standard: DVB-ASI, CENELEC EN 50083-9
Frequency: 270 Mbps
Input freq toler: ± 100 ppm
Output freq: ± 20 ppm
Return loss: >17 dB (27-270 MHz)
Signal amplitude: 800 mV +-10%
DC offset: +0.5 to -0.5 V
Rise and fall times: (20%-80%) max 1.2 ns
Reach: 275 m (900 feet), Belden 1694A

Mapping:
DTM: ETSI ES 201 803-11
TS Bandwidth: 2 – 212 Mbps

Jitter:
PCR: < ± 150 ns (no PCR re-stamping)

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:
NPS0031-3001: 8 x ASI Transport Access Module

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

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