Next generation IP media gateway

NIMBRA 380

Nimbra 380 combines native video/audio service transport with carrier-class Metro Ethernet switching to provide a high-quality multi-service solution for demanding applications.

Nimbra 380 is the next generation access switch for true multi-service transport of demanding media and data services, targeting the increasing need for advanced Ethernet services and IP QoS transport.

Applications range from high-end video services such as studio production and contribution, to broadcast distribution in IPTV/Cable TV or DTT/Mobile networks.

True multiservice networking

With 8 built-in Gigabit Ethernet ports, 4 SFP trunk ports and two slots for Nimbra 300 series plug-in units, Nimbra 380 provides QoS transport over either SDH/Sonet/Optical or IP/MPLS/Ethernet networks for a large variety of video, audio and data applications.

The integrated trunk ports can be configured as either 4 x OC-3/STM-1, 4 x OC-12/STM-4, 2 x OC-48/STM-16 or 2 x 10/100/1000 IP/Ethernet. This gives the Nimbra 380 an unprecedented flexibility and superior cost-efficiency.

Nimbra 380 is fully interoperable with the larger Nimbra One and Nimbra 600 Series switches and like these, its optical control plane supports automated end-to-end provisioning (uni/multicast) and re-routing resilience against network faults.

With support for IP/Ethernet trunks it can benefit from the availability of cost effective Ethernet last mile connections for the transport of multiple services, providing the same high quality of service as for last mile optical/SDH/Sonet connections.

Unique GPS free synchronization

The Nimbra 380 can optionally be augmented by a unique Time Transfer functionality, to provide near-GPS quality timing via fiber for reliable and independent timing support.

With up to 16 ASI/SDI ports or 24 Ethernet ports, support for any topology, QoS multicast and with a carrier class optical control plane it is ready to take on the task of nationwide DVB-T distribution and BMN contribution networks.

Nimbra 380 represents a quantum leap in advanced media/data transport solutions housed in a small outline for advanced media networking applications, for transport of virtually any service over any media. With support for redundant power supplies, in-service hardware swap and various protection mechanisms, Nimbra 380 ensures reliable and trouble-free operation.

"Nimbra 380 represents a quantum leap in advanced media transport, providing true any service over any media solutions"

net insight™

www.netinsight.net

NIMBRA 380

KEY FEATURES

Multi-service. The Nimbra 380 supports a broad range of services, such as studio and broadcast video, data and voice, on the same platform.

Bandwidth management. The Nimbra 380 handles channel bandwidth with unsurpassed flexibility. Services such as Ethernet or ASI can have bandwidth allocated with strict quality-of-service in increments of 0.5 Mbps.

Guaranteed QoS. Services enjoy guaranteed quality of service, independent of network load. This translates to much higher utilization of the infrastructure, without loss of QoS.

Advanced Ethernet functionality. Nimbra 380 supports 8 GE/FE ports with built-in switching (optional) between the 8 external ports and up to 119 logical ports towards the backplane with a total up-link capacity of up to 2.4 Gbps. Supports Ethernet (Virtual) Private Line/LAN/Tree services to fit virtually all services carried over Ethernet.

Switching capability. The Nimbra 380 supports switching and can thus be configured in any network topology, such as point-to-point, rings and mesh. They can be networked together with other Nimbra 380s or with the other switches in the Nimbra series.

Carrier class. The Nimbra 380 is designed to meet demanding operator requirements on availability and ease of handling. It provides flexible options for protection switching, extensive fault and performance monitoring and hot swap of interfaces.

Extensive management options. The Nimbra 380 can easily be managed by CLI, Web GUI, Nimbra Vision™ or 3rd party network management systems.

Enhanced QoS. FEC (Forward Error Correction) and advanced timing recovery functions are implemented to minimize potential Quality of Service degradations caused by the underlying packet network.

TECHNICAL SPECIFICATIONS

Dimensions: (HxWxD) 88mm(3.5") x 445mm(17.5") x 240mm(9.4"), IEC 60297 (19"), ETSI EN 300 119 compatible

Number of slots: 2, can be fitted freely with Nimbra 300 series plug-in modules

Fixed Ethernet access:
8 x Gigabit Ethernet: 8 x 1000BASE-T, RJ45, 802.1Q/1p, Diffserv, Jumbo frames, bridged or transparent mode

Fixed trunk ports:

4 x OC-3/STM-1: (included)	4 SFP ports, STS-3c (ANSI T1.105)/STM-1 (ITU-T G.707) framing, SRS-3c SPE/VC-4 mapping.
4 x OC-12/STM-4: (firmware option)	4 SFP ports, STS-12c (ANSI T1.105)/STM-4 (ITU-T G.707) framing, SRS-12c SPE/VC-4-4c mapping.
2 x OC-48/STM-16: (firmware option)	2 SFP ports, STS-48c (ANSI T1.105)/STM-16 (ITU-T G.707) framing, SRS-48c SPE/VC-4-16c mapping.
2 x IP/Ethernet: (firmware option)	1000BASE-T (10/100/1000) or 1000BASE-SX/LX (optical) SFPs.

Switch capacity: 5 Gbps (inter-module)

Power:

Voltage:	2 x -48 VDC (-72 to -36 VDC) (115/230VAC with external converter)
Dissipation:	<80W fully equipped

Synchronization:

Input:	2.048 MHz (1.544 Mhz), ITU-T G.703 §13
Output:	2.048 MHz, ITU-T G.703 §13
Internal osc:	Stratum 3
Time Transfer: (firmware option)	2 x 1 PPS + 2 x 10 Mhz, 50 Ohm BNC, in/out

Performance Management:
Based on ITU-T G.826

Bins:	15min/24h bins
Parameters:	ES/SES/UAS/BBE/SS

Alarm I/O: DSUB-9, 6 inputs / 1 output

Management:

SNMP:	v1/v2c/v3
Element Manager:	Web GUI, CLI
Network Manager:	Nimbra Vision

Environmental conditions:

Operating temp: (short term):	5 to 40 °C (41 to 104 °F) -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:	UL60950-1 EN60950-1
Laser safety:	CFR 21 1040.10/11
EMC	FCC 15 Class A EN 300 386
CE marking	93/68/EE

Available plug-in units:

4 x SDI Video Access	8 x ASI transport Access
1 x Gigabit Ethernet	8 x Fast Ethernet
4 x OC-3/STM-1 Access	4 x DS3/E3 Access
8 x E1/T1 Access	8 x AES/EBU Access

Ordering information:

NPQ0015-DW01	Nimbra 380 Base Unit, including 4 x OC-3/STM-1 trunk firmware
NPM0016-3004	4 x OC-12/STM-4 trunk firmware license
NPM0016-3016	2 x OC-48/STM-16 trunk firmware license
NPM0016-3ET2	2 x IP/Ethernet trunk firmware license
NPM0020-3001	Ethernet switching feature license
NPM0017-36T1	Time Transfer firmware license
NPA0031-3401	AC/DC Converter

For further information please contact this Net Insight reseller:

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