PARADYNE by ZHONE

PRODUCT DATA SHEET

Broadband Loop Carrier 8820

8820-A2-500, 8820-A2-515, 8820-A2-530

Multi Service, High-Capacity Modular BLC for large scale Central Office deployments of Voice, Video and Data over Broadband

Overview

The 8820 Broadband Loop Carrier (BLC) is a standards-based, scalable, high-capacity BLC that utilizes the latest switching fabric enabling service providers to offer voice, video, and data services from a single platform. The 8820's flexibility lets you meet market demand for multiple services, providing significant revenue generation.

As network models evolve from traditional TDM voice and high-speed Internet access to IP enabled triple play systems, the 8820 enables this capability with unsurpassed flexibility. Support for POTS, ADSL, ADSL2, ADSL2+, T1, E1, ReachDSL, SHDSL, TDM SHDSL and TDM SDSL from one platform allows services providers to add services without adding additional equipment or boxes. With the 8820s multiservice capability, service providers can economically deliver high-speed broadband services to all subscribers, no matter what their needs are.

The 8820 BLC is a carrier class access platform supporting full QoS (Quality of Service) in ATM or IP environments. For IP based networks, the 8820 supports 802.1p and DiffServ to ensure prioritization for voice and video, as well as proper handling of best effort traffic. In an ATM network, the 8820 supports four service categories; CBR, VBR-rt, VBR-nrt, and UBR. Having this granularity for ATM or IP network models means service providers can support all applications from POTS, to video, to best effort data applications, while guaranteeing QoS.

Features

- 20 slot chassis supports up to 18 line cards with a wide variety of uplinks
- Support for up to 864 ports from a single chassis
- Supports T1, E1, POTS, ADSL2+, SHDSL, or ReachDSL in any line card slot
- ADSL2+ Annex M: Symmetrical services up to 2.7 Mbps in one copper pair using standard CPEs
- Full QoS for ATM and IP networks
- Support of Single Ended Loop Test (SELT) & Dual Ended Loop Test (DELT)
- Carrier-class reliability and management
- Web-based, command line and full SNMP support

Benefits

- Support for voice, video, and a multitude of high speed data applications from a single platform
- Carrier-class, true multi-services broadband access platform supporting the widest rangle of business and residential applications in the industry
- Fault tolerant design maximizes network availability
- Integrated loop diagnostics via the use of SELT/DELT
- Wide varietry of network uplinks to meet any network requirements
- Innovative design supports ATM and IP from a single platform
- Migration from ATM to IP for investment protection
- Full QoS support for mission critical applications

Specifications

Dimensions
24.5in Hx 17.20in W x 11.5 in D (62.23cm x 43.69cm x 29.221cm)

Weight
49lbs (22.3kg) (no cards)

Power
Input Power: -42 to -72VDC
Redundant power modules: front and rear accessable

Interfaces
Uplink: 10/100/1000BT, Fiber GigE, OC3/STM1, T1/E1 IMA, DS3
Line Cards: SHDSL, ADSL2+, ReachDSL 2.2, T1, E1, POTS

Standards Support
ADSL: ITU G.992.1 (G.DMT), ITU G.992.2 (G.lite), ITU G.992.3 (G.DMT.BIS), ITU G.992.5 (ADSL2+), ITU G.994.1 (G.hs), ITU G.997.1, Annex A, Annex B, Annex M
SHDSL: ITU G.991.2, ITU G.994.1 (G.hs), ITU G.997.1
POTS: GR-506, GR-507, G.711 µLaw, G.711 ALaw, G.726, G.729, G.168 Echo cancellation, T.38 Fax relay
T1/E1: T1.403_1999, G.703, G.704

Protocol Support
ATM Features/ Specifications: 8192 VCs per system, UNI 3.0, 3.1,4.0, QOS : UBR, VBR-rt, VBR-nrt, CBR, Full VPI / VCI range, Traffic policing per TM 4.1, Traffic shaping, VC and VP switching, IMA version 1.0 and 1.1

IP Features / Specifications: IGMP Snooping, Multicast, 802.1Q VLAN, 802.1p Priority Queuing, RFC 1483/2684 Bridged Encapsulation, Address filtering, Secure forwarding, DHCP Snooping, Proxy ARP, PPPoA to PPPoE

Management
SNMP V1, V2, V3, MIB-II (RFC1213, RFC1573), ATM MIB (RFC2515), M4 MIB (ATM Forum SNMP M4 Network Element View), IMA MIB (AF-PHY-0086.1), DS1/E1 MIB (RFC 2495), Paradyne Enterprise MIB

Regulatory Compliance
NEBS (GR-63-CORE, GR-1089-CORE), UL 60950 3rd Edition, (Safety Standard), CSA 60950-00 (Safety Standard), ICES-003 Class A (Canadian Emission Standard), Industry Canada CS-03 Certified, CE (Emissions and Immunity per ETSI EN 300 386-2), EN 60950, VCCI Class A, FCC Part 15 Class A, EN 55022, Class A

Operating Requirements
Operating Temperature: -40°C to 65°C
Storage Temperature : -40°C to 80°C
Relative Humidity : 5% to 95%

Ordering Information

8820-A2-500	BLC8820 20 Slots Chassis
8411-B1-000	SCP DS3 ATM Uplink Card
8413-B1-000	SCP OC3/STM1 SM INT ATM Uplink Card
8416-B1-000	SCP 8 T1 IMA Uplink Card
8417-B1-000	SCP 8 E1 IMA Uplink Card
8429-B1-000	SCP GIGE Fiber & 10/100/1000BT Uplink Card
8799-B2-000	TDM 8 G.SHDSL / 8 E1 Line Card
8922-B1-000	POTS 24 Ports Line Card
8955-B1-000	REACHDSL 2.2 ATM 24 Ports Line Card
8968-B1-000	ADSL2+ ATM 48 Ports Line Card
8985-B2-000	G.SHDSL ATM 24 Ports Line Card
8995-B1-000	T1 8 IMA Ports Line Card
8997-B1-000	E1 8 IMA Ports Line Card