



FUSION A1600/A800

PSEUDOWIRE AGGREGATION HUBS

INNOVATIVE SOLUTIONS FOR MOBILE WIRELESS RAN BACKHAUL OVER CARRIER ETHERNET AND IP ACCESS NETWORKS

DRAGONWAVE'S FUSION A1600 AND A800 PSEUDOWIRE AGGREGATION HUBS ARE FLEXIBLE, MODULAR, CARRIER-CLASS PLATFORMS THAT ENABLE SERVICE PROVIDERS AND OTHER OPERATORS TO SUPPORT LEGACY TDM AND LAYER-2 SERVICES AND PROTOCOLS OVER ANY NEXT GENERATION PACKET NETWORK (ETHERNET, IP, MPLS).

The Fusion A1600/800 platforms are extremely scalable, fully redundant systems that have been specifically designed for mobile wireless backhaul and business service delivery central office applications.

Enables New Converged Multiservice Edge

The A1600 and A800 are typically deployed as hub points between packet-based access networks and legacy networks, such as a mobile wireless core network (GSM, UMTS and CDMA) carrying TDM, ATM, HDLC or Frame Relay protocols. When deployed at the edge of a packet-based access network, the A1600/A800 operate as companion systems together with core network infrastructure switches and routers and are used to terminate large concentrations of pseudowire-based legacy services such as T1/E1 TDM or ATM virtual circuits. The A1600/800 supports multiple physical interface types including T1/E1, DS3, OC3/STM1 and OC12/STM4 for traffic hand-off to legacy voice or mobile switching platforms, SONET ADMs, Digital Cross Connects or ATM platforms.

SOLUTION HIGHLIGHTS

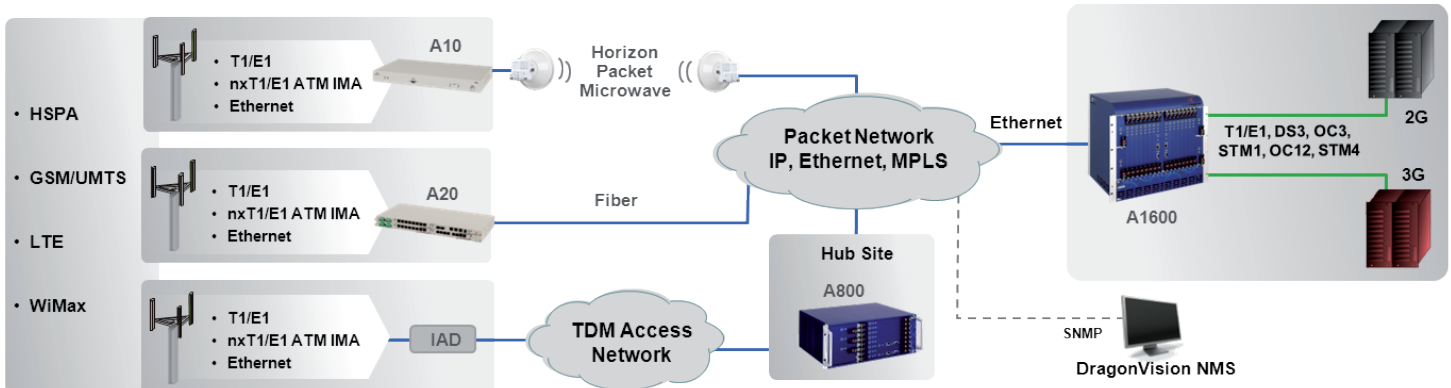
- High Capacity System, supports termination of over 1,100 T1/850 E1 emulated circuits
- The industry's most comprehensive set of IETF PWE3-compliant pseudowire capabilities including T1/E1 CESoPSN/SAToP, ATM, HDLC, and Frame Relay
- Broad range of channelized (DS0) and unchannelized narrowband and broadband physical interfaces
- "Telco-grade" carrier-class availability through a complete set of redundancy capabilities
- Advanced QoS mechanisms, including multiple prioritized queuing, DiffServ, and 802.1Q/P CoS on a per-service flow basis
- Advanced management capabilities through DragonWave's CLI and DragonVision NMS

KEY APPLICATIONS

- GSM/UMTS and CDMA/CDMA2000 RAN backhaul
- Business Service Delivery

Industry-Leading Pseudowire Platforms

The A1600 and A800, when used in concert with other DragonWave Fusion products, provides a robust end-to-end legacy services delivery solution that meets any carrier application, site or capacity requirement. Whether the requirement is for 2G/3G mobile backhaul, legacy business services delivery, or legacy protocol packet network transport, the A1600/800 platforms provide a comprehensive central site solution for the aggregation, switching and termination of legacy traffic streams.



PHYSICAL INTERFACES

IOM LINE CARDS (IOM)

- 16-port channelized T1/E1
- 3-port channelized (DS0) T3
- 1-port channelized (DS0) OC-3/STM-1
- 3-port OC-3c/STM-1 ATM
- 2-ports channelized (DS0) OC-12/STM-4 or
 - 8-ports channelized (DS0) OC-3/STM-1

NETWORK UPLINK (INI)

- 2-ports Gigabit Ethernet 1000BaseX

MANAGEMENT CARD (ICP)

- RS-232, RJ-45

POWER OPTIONS

- DC Power: -36 to - 72 VDC
 - Nominal: -48, -60 VDC
- AC Power: 90 to 264 VAC
 - Nominal: 100 – 240 VAC

RESILIENCY

- OC-n/STM-n: L-MSP/LAPS, equipment and link protection
- INI: 1:1 Redundancy, LAG (IEEE 802.3ad), equipment and link protection
- Power Supply 1:4 Redundancy (1600)
- Power Supply: 1:3 Redundancy (800)
- ICP: 1:1 Redundancy
- All modules are hot swappable

PSEUDOWIRE SERVICES

TDM-CES

- Framed (CESoPSN)
 - n x DS0 (1=< n =< 31)
- Unframed (SAToP)

ATM

- Cell based (AAL0): VCC/VPC/Port, VCC bundle
- Frame based (AAL5): VCC

HDLC/PPP

- Port mode

FRAME RELAY

- One-to-One mode
- Port mode

IP SERVICE INTERWORKING

- FR, HDLC, PPP, ATM-AAL5

ETHERNET SERVICES

- Bridging/Forwarding between Ethernet interfaces
- Port-based VLAN tagging
- VLAN stacking per customer VLAN
- Rate limiting (per port)
 - Up to 1 Mbps – 512 kbps steps
 - 1 Mbps up to 100 Mbps – 1 Mbps steps
 - 100 Mbps up to 1 Gbps – 10 Mbps steps

OAM

DIAGNOSTICS

- Terminal (Local) loopback
- Facility (Remote) loopback
- FDL
- In band loopback
- BERT

PERFORMANCE MONITORING

- According to ITU-T G.826

ALARMS

- According to ITU-T G.706, G.751, G.775, G.783, T1.107

Physical Specifications	A1600N	A1600E	A800
Dimensions (H x D x W) Inches Centimeters	9 RU x 13.7 x 19" 40 x 35 x 43.6	14 RU x 10 x 19" 65 x 25 x 43.2	4 RU x 14.4" x 19" 17.8 x 36.5 x 43.6
Weight	9.6Kg	11Kg	8.32Kg
Number of Slots	16	16	8
Architecture	Mid-Plane carrier class 2 x INI (redundant) 2 x ICP (redundant) 12 x IOM	Mid-Plane carrier class 2 x INI (redundant) 2 x ICP (redundant) 12 x IOM	Mid-Plane carrier class 2 x INI (redundant) 2 x ICP (redundant) 4 x IOM
Mounting	19" Telco Rack	19" ETSI (300 mm depth)	19" Telco Rack