



Multi-Service Access Aggregation Switches

Evolving communication networks profitability requires an evolutionary solution. Advanced Switching Communication's multi-service access aggregation switches with MultiStream™ technology enable a smooth evolution to next-generation packet networks and open new market and revenue opportunities for service providers. By intelligently aggregating diverse network protocols onto a single, unified backbone, ASC enables carriers to cost-effectively offer their customers the latest in packet-based applications.

Product Features

From standalone products that can be stacked as customer density grows to a high-density multi-slot chassis, ASC's family of MultiStream™ products makes it just as cost effective to provide a range of broadband services to a handful of customers as it is to thousands in virtually any size market.

Speed— broad range of clear channel and channelized speeds from DS-0 and fractional T1/E1 through OC-12-c/STM-4

Flexibility—TDM, ATM, and frame relay support on the same card with "any port, and protocol, anytime" flexibility

FIT—scalable, progressive system for any size market

Assurance—reliable service level agreement, not just "best efforts"

Access Network Solutions

Multi-protocol Network Support

Whether it's ATM, frame relay, private line or NxT1/E1 services, you can satisfy customer needs with a single platform. Save more than 40% on facility and equipment costs while converting and migrating traffic to a packet core.

NxT1/E1 Support

When you need more than a

T1/E1, but a T3/E3 is too costly or not available, ASC lets you add capacity in T1 or E1 increments. ASC supports both inverse multiplexing over ATM and multilink frame relay on the same card, allowing you to offer NxT1/E1 services or reduce the cost of interoffice trunks.

Network Extension

ASC allows you to economically extend your packet-based networks into new markets by remotely concentrating multiple traffic types onto a single facility. ASC significantly lowers the cost of establishing remote PoPs—generating revenue from new markets while enabling a quick return on investments.

Access Aggregation

ASC offers you a cost-effective way to efficiently aggregate multi-service traffic from DSLAMs, remote PoPs, wireless base stations, customer sites or any other access network sites. You save on facilities and port costs while simplifying network management.

Mobile Wireless Concentration

ASC dramatically reduces the equipment and circuits required to concentrate traffic from AMPS, 2G, 2.5G, and 3G cellular base stations onto a unified, high-speed backhaul connection.

Benefits:

- Smooth migration to next-generation networks
- New revenue from new services
- Rapid ROI
- Faster provisioning
- Service assurance



A-1240

A-2000

A-3010



A-4000

Communication solutions from

NSGDatacom

extend. evolve. innovate.

FEATURE	A-1240	A-3010	A-2000	A-4000
Applications	<ul style="list-style-type: none"> • Smaller market Points of Presence (PoPs) • Low cost multi-service switching and concentration • New frame relay and/or ATM PoPs • NxT1/E1 services • DSLAM aggregation • In-building or small metro hub • ILEC collocation • Mobile wireless radio access optimization 	<ul style="list-style-type: none"> • Smaller market Points of Presence (PoPs) • Low cost multi-service switching and concentration • New frame relay and/or ATM PoPs • NxT1/E1 services • In-building or small metro hub • ILEC collocation 	<ul style="list-style-type: none"> • Smaller market Points of Presence (PoPs) • Low cost multi-service switching and concentration • DSLAM aggregation • New frame relay and/or ATM PoPs • T3/E3 services • ILEC collocation 	<ul style="list-style-type: none"> • Large Market of high density Points of Presence (PoPs) • New frame relay and/or ATM PoPs • NxT1/E1 services • DSLAM aggregation • In-building or small metro hub • ILEC collocation • Mobile wireless MSC aggregation
Ports (any port)	<ul style="list-style-type: none"> • 24 T1/E1 • 1 T3/E3 or OC-3c/STM-1 port • Channelized T1 option <ul style="list-style-type: none"> - Up to 288 frame relay users - Up to 576 TDM channels • 1 10/100 Ethernet 	<ul style="list-style-type: none"> • 1 channelized T3 port (28 logical T1 connections) • 1 clear channel T3 • Channelized T1 option <ul style="list-style-type: none"> - Up to 288 frame relay users - Up to 576 TDM channels • 1 10/100 Ethernet 	<ul style="list-style-type: none"> • 4 T3 and OC-3c ports or 5th T3 port; or • 4 E3 and 1 STM-1 ports 	<ul style="list-style-type: none"> • Up to 336 T1/E1 • Up to 14 channelized DS-3 • Up to 56 T3/E3 • Up to 16 OC-3c/STM-1 • Up to 4 OC-12/STM-4 ports • Channelized T1 option <ul style="list-style-type: none"> - Up to 4700 possible frame relay users - More than 8,000 TDM channels
Protocols	ATM, frame relay, IMA, MFR, TDM,/CES, VLAN	ATM, frame relay, IMA, MFR, TDM,/CES, VLAN	ATM, frame relay	ATM, frame relay, IMA, MFR, TDM,/CES
QoS (ATM & Frame Relay)	Yes	Yes	Yes	Yes
Traffic Shaping	Yes	Yes	Yes	Yes
NxT1/E1 Line Bundling	IMA or MFR, multiple bundles <ul style="list-style-type: none"> - Up to 12 bundles - Up to 8 circuits per bundle 	IMA or MFR, multiple bundles <ul style="list-style-type: none"> - Up to 12 bundles - Up to 8 circuits per bundle 	N/A	NxT1/E1 IMA or MFR, multiple bundles <ul style="list-style-type: none"> - Up to 168 bundles - Up to 8 circuits per bundle
ATM-Frame Relay Interworking	Yes	Yes	Yes	Yes
Switching	Yes	Yes	Yes	No
Redundancy	No	No	No	Yes (SONET, APS, DCAR)
Facilities Testing (BERT, Smartjack)	Yes	Yes	Yes	Yes
NEBs Level 3	Yes	Yes	Yes	Yes
Form Factor/Footprint	1 RU "pizza-box" chassis or single slot in A-4000	1 RU "pizza-box" chassis or single slot in A-4000	1 RU "pizza-box" chassis or single slot in A-4000	14 RU, 18-slot chassis
Network Management	CLI, SNMP, Web	CLI, SNMP, Web	CLI, SNMP, Web	CLI, SNMP, Web

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