

ACCELERATOR 6850

SCALE AND FLEXIBILITY FOR TODAY'S DEMANDING
DATACENTER ENVIRONMENTS

SIX REASONS TO SAY "YES" TO EXPAND

1. Comprehensive

Whether the WAN is used to connect file servers, email or business applications, Expand delivers a comprehensive approach to application and protocol acceleration.

2. Proven, Measurable Impact

Expand solutions consistently deliver bandwidth increases of 100% and 400% (with peaks over 1,000%).

3. Application-centric

Traditional optimization solutions are about the network — the Expand solution is about what really matters: the applications.

4. Transparent Operations

Expand's solution optimizes traffic transparently without tunneling, simplifying integration into your networking infrastructure while also preserving investments in other systems.

5. All IP

Many WAN Optimization solutions narrowly focus on only a portion of TCP-based traffic. Expand optimizes non-TCP traffic (UDP, etc.), as well as difficult interactive applications such as Citrix and Terminal Services.

6. Microsoft Compliance

The Expand solution is part of the Microsoft Domain so it can strictly maintain all user and document security and controls while optimizing performance.

Expand Accelerators for the Datacenter deliver the maximum in throughput and number of simultaneous optimized sessions without requiring significant changes to your existing infrastructure.

About the Accelerator 6850

The Accelerator 6850 for data centers delivers:

- Up to 45 Mbps of compression
- Up To 250 Mbps of TCP acceleration & Layer-7 QoS
- Up to 350 connected remote Accelerators
- Up to 256,000 concurrent TCP sessions
- Multiport Ethernet Card – 4 port copper

Productivity and Performance

All Expand solutions are designed with productivity, cost reduction, and simplicity in mind. For end users, productivity increases as application performance reliably improves. Time spent waiting for data and applications access over the WAN is dramatically reduced if not eliminated. By providing a simple and integrated solution, Expand enables IT to more efficiently manage the application infrastructure—reducing servers and other appliances while delivering a holistic network view from a single access point. The productivity and performance gains made possible by Expand deliver a crisp and measurable return on investment

Transparent Operations

Many WAN optimization solutions tunnel between appliances, obfuscating information needed by monitoring solutions like NetFlow, or security implementations like firewalls and ACLs. Expand's solution optimizes traffic



transparently without tunneling, simplifying integration into your infrastructure now and in the future.

The Expand solution works with HSRP/VRRP and WCCP and maintains original protocol headers (IP, TCP, UDP, etc.) so that there is minimal impact to your networking infrastructure, while also preserving investments in other systems relying on the accuracy of these headers.

All IP Traffic

Many WAN Optimization solutions are narrowly focused on a portion of TCP-based traffic. Expand's IP optimization engine not only optimizes non-TCP (UDP, etc.) traffic, but will also optimize the difficult interactive applications based on TCP such as Citrix, Terminal Services or RDP, and Telnet. All IP traffic is optimized and no compromises are necessary.

Holistic WAN Optimization

Point solutions for WAN optimization and application acceleration may solve specific technical issues, while leaving you vulnerable to performance issues that jeopardize overall business objectives. Expand delivers a holistic platform of integrated services—WAN Optimization, Acceleration, Management & Visibility, and Security—addressing WAN performance issues while also aligning with your key business drivers.

Functionality	
WAN Optimization	
Compression	Completely transparent data reduction, caching, and other techniques for all IP traffic, including UDP and interactive TCP (Citrix, RDP, etc.)
QoS	Easy to use inbound and outbound priority and shaping control, with burst-capable bandwidth limits and application keep-alive technology
Acceleration	
Application Optimization	Oracle, SAP, Exchange, Citrix, RDP, Double-Take, Maximo, SnapMirror, MIMIX, BAAN, and all other IP-based applications
Protocol Optimization	SCPS-TP (TCP), HTTP, FTP, ICA, RDP, VoIP and Streaming Protocols
Management & Visibility	
ExpandView	Automatic performance and device monitoring, template-based configuration profiles, and automated device updates
Application & Network Visibility	Automatic discovery of over 400 applications with Layer 7 visibility
Security	
Encryption	IPSec 3DES or AES (AES-128, AES-192, or AES-256) link encryption
AAA	RADIUS (RFC 2138), TACACS+
Performance Specifications	
WAN Capacity	Compression ¹ : 10Mbps-45Mbps / Optimization ² : 10Mbps-250Mbps / Acceleration ³ : 10Mbps-100Mbps
No. of WAFS Users	Not applicable
Maximum LAN Throughput	1,000 Mbps
No. of IP Connections	256,000
Hard Drive	No Hard Drive
Connected Accelerators	350 connections to remote Accelerators
Memory	4 GB
Network Transparency	Transparency Mode with complete Layer 3 and Layer 4 header preservation — no tunnels
Failover	Standards-based with HSRP (RFC-2281) and VRRP (RFC-2338)
Resilience	Switch-to-wire & Redundant Hot swappable PSU
Dimensions	17.4" x 3.5" x 20.2" (44.3 cm x 8.8 cm x 51.2 cm)
Weight	23.8 lbs (10.8 kg)
Network Interfaces	Two color-coded 10/100/1000 BaseT Ethernet (RJ45) with bypass functionality
Power	Redundant Power Supply (hot swappable): Dual Auto-sensing Dual-feed 100-240 VAC, 50-60 Hz, 2.6-1.13A
Power Consumption	250W (Max)
Temperature	5° to 40° C (41° to 104° F) : Non-Operating 0-70°C
Humidity	10 to 90% (non condensing) : Non-Operating 5%-95%
Heat Dissipation	853 BTU (Max)
Safety	UL 60950-1:2003, CAN/CSA C22.2 no 60950-1-3, IEC 60950-1 2001, En 6950-1/A11:2004, AS/NZS-60950
EMC	Class A - FCC part 15 Subpart B (CFR 47), En 55022:2006, En 61000-3-2: 2006, En 61000-3-3: 1995 +A1: 2001 +A2: 2005, En 55024: 1998 +A1: 2001 +A2: 2003, AS/NZS CISPR 22: 2006, CISPR 22: 2005 +A1:2005, ICES - 003 issue 4, VCCI

WAN CAPACITY

Product	Connected Accelerators	No. of IP Connections	WAN CAPACITY				Hard Drive Capacity	No. of WAFS Users	Redundant Power Supply
			Compression ¹	Optimization ²	Acceleration ³	WAFS ⁴			
Accelerator 6950	350	256,000	45Mbps	250Mbps	100Mbps	Unlimited	500GB RAID 1	1000	✓
Accelerator 6850	350	256,000	45Mbps	250Mbps	100Mbps	-	-	-	✓
Accelerator 6930	200	128,000	10Mbps	100Mbps	45Mbps	Unlimited	500GB	500	✓
Accelerator 6830	200	128,000	10Mbps	100Mbps	45Mbps	-	-	-	✓
Accelerator 4930	100	64,000	6Mbps	45Mbps	15Mbps	Unlimited	160GB	200 ⁵	Optional
Accelerator 4830	100	64,000	6Mbps	45Mbps	15Mbps	-	-	-	Optional
Accelerator 3930	100	64,000	2Mbps	15Mbps	6Mbps	Unlimited	160GB	50 ⁵	-
Accelerator 3830	100	64,000	2Mbps	15Mbps	6Mbps	-	-	-	-
Accelerator 1610 *	10	32,000	1Mbps	6Mbps	3Mbps	-	-	-	-

¹ Maximum Bandwidth For Monitoring, Layer 7 QoS And Compression.
² Maximum Bandwidth For Monitoring Layer 7 QoS And TCP Acceleration (SCPS).

³ Expected Bandwidth For A Mixture Of Services Such As TCP Acceleration, Partial Compression, WAFS, Web Caching.
⁴ Maximum Bandwidth For Monitoring Layer 7 QoS and WAFS, Limitation Is The Number Of Users And The Physical Connection.

⁵ Accelerator 4930 & 3930 Can Only Be Used As A Branch Device For WAFS.
 * The 1610 accelerator is a PC104+ compliant device and requires a PC104+ compliant enclosure for use.