

ACCELERATOR 6950

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 all IP traffic (TCP, 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

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 6950

The 6950 Accelerator for data centers delivers:

- Up to 45 Mbps of compression throughput
- Up To 250 Mbps of TCP acceleration and Layer-7 QoS throughput
- Up to 350 connected remote Accelerators
- Up to 256,000 concurrent TCP sessions
- Up to 1,000 WAFS users
- RAID-1 redundancy with hot-swap support

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 Compass 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. The IP optimization engine in Compass 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 with Compass and no compromises are necessary.

Microsoft Compliance

The Expand solution not only works with the Microsoft domain, it is actually part of the Domain. This allows the Expand Compass to strictly maintain all user and document security and controls while optimizing performance. Compass is fully compliant with Microsoft's SMB-signing protocol guaranteeing communication authenticity — Compass will accelerate with SMB-signing on. In addition, being part of the Domain, Compass can easily provide printing, DHCP, and even WAN-Out services seamlessly, allowing for true server consolidation.

Holistic WAN Optimization

Point solutions for WAN optimization and application acceleration may solve specific technical issues, while leaving you vulnerable to performance issues that

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	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 Speed for Compressed Throughput	2 Mbps – 45 Mbps
WAN Speed for TCP Acceleration and Layer-7 QoS Throughput	2 Mbps – 250 Mbps
Maximum LAN Throughput	1,000 Mbps
Concurrent TCP Sessions	256,000
Hard Drive	2 x 500GB (RAID 1)
Connected Accelerators	350 connections to remote Accelerators
Memory	4GB
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, RAID-1 capabilities
Max number of Bypass Ports	Dual port copper gigabit Ethernet
Dimensions	18.2 x 17 x 3.5 in (46.3 x 43.2 x 8.8 cm)
Weight	39.5 lb (17.92 kg)
Network Interfaces	10/100/1000-T Ethernet (RJ45) with bypass functionality
Power	Redundant Power Supply (hot swappable): Dual Auto-sensing Dual-feed 100-240 VAC, 50-60 Hz, 10A-6A
Power Consumption	250W (Max)
Temperature	5° to 40° C (41° to 104° F)
Humidity	10 to 90% (non condensing)
Heat Dissipation	853 BTU (Max)
Safety	EN 60950-1:2001, IEC 60950-1:2001
EMC	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 7940	350	256,000	45Mbps	250Mbps	100Mbps	Unlimited	1TB RAID 5 *	1000	✓
Accelerator 7930	350	256,000	10Mbps	100Mbps	45Mbps	Unlimited	500GB RAID 5 *	500	✓
Accelerator 6940 / 6950	350	256,000	45Mbps	250Mbps	100Mbps	Unlimited	500GB/500GB RAID 1	1000	✓
Accelerator 6840 / 6850	350	256,000	45Mbps	250Mbps	100Mbps	-	NONE / NONE	-	✓
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 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 Can Only Be Used As A Branch Device For WAFS.

* Hot Swappable Raid 5

** The 1610 accelerator is a PC104+ compliant device and requires a PC104+ compliant enclosure for use.