

DATA SHEET

PRX-10G TRAFFIC MANAGER

PRX-10G is a carrier-grade bandwidth management solution scalable up to ten Gigabit Ethernet or ten 10 Gigabit Ethernet links enabling operators to monitor and control network traffic per application and per subscriber. PRX-10G detects applications with a combination of layer-7 deep packet inspection (DPI) and behavioral traffic analysis. All major protocols used for video- and media streaming, P2P, instant messaging (IM), Internet telephony (VoIP), tunneling and online gaming are supported. The integrated QoS management allows prioritization, shaping and filtering of classified traffic. Extensive accounting features provide in-depth application- and subscriber-aware network visibility.



COMPREHENSIVE PROTOCOL SUPPORT

- Support for over 200 protocols
- All standard protocols for Web, e-mail and file transfer
- Close to 100% detection and regulation accuracy for all supported protocols
- All important protocols for P2P file sharing, internet telephony, media streaming, instant messaging, tunneling, online gaming
- Custom protocol definitions
- Traffic management and statistics for MPLS-labeled, VLAN-tagged and DSCP-labeled traffic
- Tunnel decapsulation for GRE, IP-in-IP and GTP-U tunnels
- Integrated QoS management

ULTIMATE PERFORMANCE

- Optimized to meet the performance requirements of even the most demanding network environments
- Performance scales up to fully loaded 10 gigabit links
- Packet latency below 0.1 millisecond
- Scalability and high availability
- Active-active load balancing over up to 14 packet processing blades with automatic fail-over
- Most hardware components are redundant and hot-pluggable
- Hot-standby blades

HIGHLIGHTS

75 Gbit/s throughput

Layer-7 protocol detection with DPI and behavioral analysis

Full protocol detection including Skype, BitTorrent, HTTP, flash video streaming and VPNs

Support for asymmetric network traffic

QoS management per application and subscriber

Tiered service and pricing models

Subscriber policy management

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EASY TO INSTALL AND OPERATE

- Transparent bridge operation for a seamless integration into existing network environments
- Simple configuration via Web-based management console

STATISTICS, LOGGING, ACCOUNTING AND REPORTING

- Graphical usage statistics per link, subscriber group, application and application class for configurable time intervals ranging from one hour to one year
- Predefined reports issued to regain control over the network, detailing the network usage from different perspectives
- All statistical data automatically exported at different aggregation levels (i.e. per link, per subscriber, per user group) for subsequent processing in external accounting systems
- Fine-granular service usage information through optional application-level connection logging to an external statistics server

FLEXIBLE SUPPORT AND SERVICES

- Outstanding levels of customer satisfaction including 24/7 support with 4 hours reaction time and remote installation support
- Regular protocol signature updates
- BladeCenter parts can be replaced through IBM's worldwide support network
- Customization services to meet specific requirements not available in off-the-shelf products

PRX-10G	
Performance	
Throughput	75 Gbit/s ^{1,2}
Packet Rate	10 million ^{1,2}
Number of Active Connections	240 million ²
New Connection Rate	10 million ^{1,2}
Configuration Limits	
Subscribers	6 million ²
Policy Classes	100
Rules per Profile	1000
Active Rules per System	60 million ²
Subnets	100
Subnet Exceptions	100
Profiles	60
Interfaces	
Network Ports (Int./Ext.)	12x 10 Gigabit Ethernet XFP 12x Gigabit Ethernet 10/100/1000 Base-T or SFP
Management Port	10/100/1000Base-T
Console Port	integrated KVM switch
Hardware	
Size	7-9U rack mount, NEBS-3 compliant: 8-12U
Weight (kg)	60-150
Power	Up to 4 redundant, AC 200-240V, 2000W, optional: DC -48 to -60V
Certifications	optional: NEBS Level 3
Protocol Support Includes ³	
Peer-to-Peer (P2P) Protocols	AppleJuice, Ares, BitTorrent (encrypted and unencrypted), DirectConnect, eDonkey, KaZaa/FastTrack, Filetopia, Freenet, Gnutella, iMesh, Manolito, Mute, OpenFT, OFF, Pando, SoulSeek, Thunder/Webthunder, WinMX, Winny, XDCC
Voice over IP (VoIP) Protocols	H.323, IAX, MGCP, SIP, Skinny, Skype
Instant Messenger (IM)	Gadu-Gadu, IRC, PoPo, Jabber/Google Talk, MSN, Oscar, Yahoo, Paltalk, QQ
Streaming Protocols	AVI, Feidian, Flash, Icecast, Kontiki, MMS, Move, MPEG, OGG, ORB, PPLive, PPStream, QQ, QuickTime, Real Media Stream, RTP, RTSP, SCTP, SHOUTcast, Slingbox, SopCast, TVAnts, TVUPlayer, UUSee, V CAST, VeahTV, Windows Media Stream, Zattoo
Standard Protocols	Citrix, BGP, DHCP, DNS, EGP, FTP, HTTP, ICMP, IGMP, IMAP, MySQL, NFS, NTP, OSPF, pcAnywhere, POP3, PostgreSQL, RDP, SMB/CIFS, SMTP, SNMP, SSDP, STUN, Telnet, Usenet, VNC, Direct Download Link (DDL)
Gaming Protocols	Battlefield, Half-Life 2 and Mods, Quake, Second Life, Steam, World of Warcraft, Xbox
Tunnel Protocols	SSL, GRE, HamachiVPN, IPsec, OpenVPN, SoftEthernet, SSH, Tor, VPN-X, VTun, L2TP
Options	
Reporting	enables export of reporting data including: <ul style="list-style-type: none"> • per application, per subscriber statistics • top talker statistics for applications and subscribers

¹ ISP-Mix/C packet size distribution

² Depends on number of packet processing blades

³ For detailed protocol support information, check www.ipoque.com/protocol-support