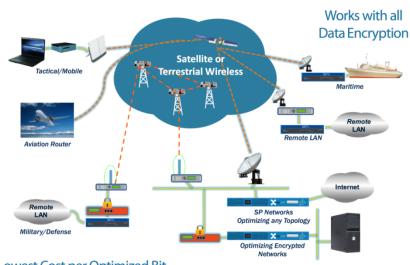


XipLink XA Optimization Appliances Overview

Хір

Maximum Wireless Capacity Increased throughput and reduced cost

XA-Appliances deliver the most advanced satellite and wireless optimization in easy to install appliances, assuring proper throughput at a reasonable capital cost. For small and medium sized sites with access speeds from a few Kbps to 16 Mbps, desktop style appliances are user-installed via logical GUI templates thus minimizing impact to the operations staff. For high speed links or central aggregation sites, fully redundant appliances will optimize links with aggregate capacities from 30 Mbps to 1.3 Gbps, supporting up to 200,000 simultaneous TCP sessions and dramatically increasing effective throughput to the customer.



Lowest Cost per Optimized Bit

XipLink Operating System (XipOS) is available on XA-Appliances, XipLink-XV Virtual Machine software and single board computers using XipLink-XE soft optimizers. XipOS achieves a high rate of bandwidth efficiency by providing simultaneous optimizations including TCP acceleration, several compression mechanisms, sophisticated cache techniques, web optimizations and header reduction. To increase overall effectiveness, XipOS provides a class-based QoS mechanism and has the ability to link balance when multiple paths are present. All XA appliances are interoperable with other XipOS implementations as well as SCPS-compliant TCP accelerators. XipLink devices work over any wireless, wireline or hybrid network including the following network technologies;

- VSAT and Access
- Terrestrial Wireless
- Cellular / LTE
- Terrestrial
- MSS

- -TDMA / SCPC / Mesh
- WiMax / Microwave / Extended WiFi
- 2.5G / 3G / 4G Interconnect and Backhaul
- Point-to-Point and Point-to-Multipoint
- Inmarsat, Iridium and equivalent

XipLink Operating System (XipOS)

SCPS-TP Protocol Acceleration

STEP

ELECTRONICS

A Division of Av-Comm

- Fills the wireless link to capacity
- SCPS-TP based TCP acceleration
- Interoperable PEP (I-PEP) compliant
- XipLink Transport Control (XTC) Modes
 - Enhanced TCP
 - Fixed Rate Control
 - Dynamic Rate Control
 - Delay-Based Rate Control

Advanced Quality of Service (QoS)

- Shape the wireless link bandwidth
 - Intelligent traffic shaping
 - Hierarchical QoS classes
 - Understands link state
- Configurable committed, maximum rates

Header and Payload Data Compression Exceeds the wireless link bandwidth

- Dramatic bandwidth gain, as high as 30% to 200%
- Reduces the number of packets
- Bandwidth reduction for VoIP, Skype & small packets using XipLink Real Time (XRT)

Internet Optimizations

Compress & control the explosion of data & video traffic

- XipLink Hub Optimizations (XHO)
- XiPix lossy & Gzip lossless compression
- Transparent remote cache models

XipLink Byte Cache

Dramatic data reduction for multi-pass traffic

- Effective on viral videos, Internet content, etc.
- Up to 80% reduction from most traffic types
- IP-layer: Effective for both TCP and UDP traffic

XipLink Link Balancing with Bonding

- Dramatic increase in capacity with reliability
 - Increase capacity and/or reliability
 - Single stream scaled over multiple paths

Advanced Cellular Compression (ACC)

- Controls growth in cellular TCP & UDP traffic
 - Supports 2.5G, 3G, 4G/LTE & Wi-Fi hotspots.
 - 30%+ traffic reduction and 100 Mbps+ TCP

Advanced Features

- Optimizes some unique formats and tunneled traffic
- Transparent VLAN support
- GRE and GTP tunnel traffic optimization

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XE – XipLink Embedded

XA-Appliances



XA Model	Total Rate (In + Out)	Max. Opt. Sessions	Fail to Wire (Bypass)	TCP (SCPS) Acceleration	Data/Header Compression	Web/Byte Caching	ACC	ХНО	XRT	Link Balancing
XA-500C	4 Mbps	500	-	Yes	Yes / Yes	Yes / Yes	Yes	-	Yes	Yes
XA-1000C	6 Mbps	1,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	-	Yes	Yes
XA-2000C	10 Mbps	2,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	-	Yes	Yes
XA-4000C	20 Mbps	4,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	-	Yes	Yes
XA-6K	30 Mbps	6,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-10K	50 Mbps	10,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-20K	100 Mbps	20,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-30K	200 Mbps	30,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-60K	400 Mbps	60,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-100K	650 Mbps	100,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes
XA-200K	1.3 Gbps	200,000	Yes	Yes	Yes / Yes	Yes / Yes	Yes	Yes*	Yes	Yes

Hardware Specifications

Models: XA-500C Rev5

H x W x D *	Weight	Temp. Range	Power
20 x 124 x 120 mm	0.5 kg	-5° to 40°C	36 W
0.8 x 4.9 x 4.7 in	1.1 lbs	23° to 104°F	36 W

* Optional rack mount kit and external -48VDC convertor available.

Models: XA-1000C, 2000C & 4000C Rev5

H x W x D *	Weight	Temp. Range	Power
44 x 177 x 146 mm	1.2 kg	-5° to 40°C	60 W
1.7 x 7.0 x 5.7 in	2.7 lbs	23° to 104°F	60 W

* Optional rack mount kit and external -48VDC convertor available.

Models: XA-6K, 10K & 20K Rev5

H x W x D	Weight	Temp. Range	Power *
44 x 438 x 415 mm	10 kg	0° to 40°C	300 W
1.7 x 17.2 x 16.3 in	22 lbs	32° to 104°F	300 W

* Redundant power supply modules included.

* Optional -48V DC power modules available.

Models: XA-30K, 60K, 100K & 200K Rev5

44 x 442 x 675 mm 20	kg 5° to 40°C 500 W
1.7 x 17.5 x 26.6 in 44	lbs 41° to 104°F 500 W

* Redundant power supply modules included.

* Optional -48V DC power modules available.

Compliance: All models are CE / FCC / IC certified. Specification: Subject to change.

*Optional, available upon request



