

turboIP®-G2 Performance Enhancement Proxy - DoD



1/2-Wide turboIP-G2



Full-Width 1RU turboIP-G2

NEXT GENERATION SATELLITE ACCELERATION

The turboIP®-G2 is the next generation in the line of turboIP Performance Enhancement Proxies (PEPs), specifically built to meet the satellite acceleration needs of today's Department of Defense (DoD) Satcom programs. Building on the legacy of the turboIP, the new turboIP-G2 combines standards-compliance, interoperability, DoD security and management features, and Wide Area Network (WAN) optimization into a single COTS platform.

FLEXIBLE

Accelerating at speeds of 15 or 45 Mbps, the turboIP-G2 works equally as well as a hub device or a remote site PEP. A true plug-and-play device, the turboIP-G2 can be dropped into a network seamlessly, regardless of the architecture, with virtually no user configuration required. The turboIP-G2's smart congestion controls allow it to accelerate in the DoD's most complex networks, and is compatible with the United States military's most commonly deployed TDMA technologies.

ACCELERATION AND WAN OPTIMIZATION

All turboIP Performance Enhancement Proxies combat the inherent challenges of transmitting TCP over satellite links. The units provide transparent acceleration of TCP sessions, increasing throughput over satellite links while requiring minimal topology changes. They provide reliable connection-oriented, end-to-end data transfer for user applications.

Like all products in the turboIP line, the turboIP-G2 is fully compliant with the Space Communications Protocol Standard Transport Protocol (SCPS-TP) standard and provides optimized interoperability with all models of turboIP, current and past.

Powered by the industry-leading SCPS implementation, SkipWare®, the turboIP-G2 overcomes performance loss associated with conditions common in tactical networking, including weather effects, blockage, latency and interference.

The turboIP-G2 complies with DoD requirements for volatile memory data storage by providing RAM-based web caching. The turboIP-G2 also provides support for both IPv4 and IPv6, allowing DoD programs to satisfy IPv6 conformance mandates.

FEATURE ENHANCEMENTS

Enhancing the capability of turboIP-G2 in the field is easy. Features that do not require additional hardware can be added on site, using FAST access codes purchased from Comtech EF Data.

FEATURE SET

The turboIP-G2 is fully compliant with the SCPS-TP standard and provides optimized interoperability with all models of turboIP, current and past.

- SCPS-TP (MIL-STD-2045-44000)
- Accelerated WAN at rates up to 15 Mbps
- Intelligent Congestion Control
- VLAN Support
- GRE Tunnel Support
- Rate Pacing or Dynamic Bandwidth (Per Connection Support)
- HTTP and SNMP v3/v2/v1 Network Management
- Quick Start
- Automatic Window Scaling
- Selective Acceleration
- Black Hole Detection & Recovery
- Path Maximum Transmission Unit (MTU) Discovery
- Tolerates packet reordering
- Supports large queues
- Up to 3,200 simultaneous accelerated sessions with bypass of additional sessions
- Asymmetrical Route Management
- Support for IPv4
- Meets DoD Security Requirements
- Fail-to-Wire
- Available in 1/2-wide x 1RU and full width 1RU models
- Developed in the USA
- DHCP Support
- 1 year warranty

turboIP®-G2 Performance Enhancement Proxy - DoD



1/2-Wide *turboIP-G2* chassis with 1RU mounting kit and blank panel

OPTIONAL FAST FIELD UPGRADES

- IPv6 acceleration and management
- Data and Header Compression
- HTTP RAM-based Caching
- CIFS/WAFS Acceleration
- 45 Mbps WAN rate

OTHER OPTIONS

- Software maintenance agreement
- Rack mount kit for 1/2-wide chassis

SPECIFICATIONS

Rear Connectors (4)	LAN and WAN (1 each): RJ-45, 10/100/1000BaseT Ethernet, auto-sensing and auto-crossover EIA-232 (CONSOLE) AC Power (IEC-320)
Front Panel Status LEDs	Link and activity for LAN, WAN Power indication with on/off control
Temperature	Operating: 5° to 60° C Storage: 0° to 75° C
Humidity	Operating: 5 to 90% @40° C, non-condensing
Vibration	Operating: 5 to 17 Hz, 0.1" double amplitude displacement 17 to 500 Hz, 1.5G acceleration peak-to-peak (max.)
Shock	Operating: 15G acceleration peak (1 ms duration)
Safety	EN-60950 (CE)
EMC	FCC Part 15 Class B / EN55022-EN55024 (CE)
Power Supply	90-132 VAC or 180-260 VAC @ 47-63 Hz, 110W max
Chassis 1/2-Wide Dimensions	8.25W x 1.68H x 15.3D inches (210W x 43H x 389D mm)
Weight	< 7lbs (3.2 Kg)
Chassis Full-Wide Dimensions	16.75W x 1.73H x 12.3D inches (425.45W x 44H x 312D mm)
Weight	8.5 lbs (3.86 kg)
Cooling Fans	2 internal fans



Rear View 1/2-Wide *turboIP-G2* Dual Mounted in 19" Rack Mount Kit



Rear View Standard 19" *turboIP-G2*

