

S4224



Carrier Ethernet Access/Aggregation Switch



Transition Networks' Carrier Ethernet solution delivers the promise of simplicity deployed. This comprehensive solution includes CE 2.0 certified demarcation devices, access switches, and the Converge™ element and service management platform.

With the goal of enabling new service generating revenue, Transition Networks' S4224 access switch with 24 100/1000Mbps ports and 4 10GE uplinks is designed to support a wide range of MEF-based Carrier Ethernet services for Mobile Backhaul, Business Ethernet, Cloud Assurance and Carrier Exchange E-Access Services.

Transition Networks' Converge™ platform is designed to simplify service provisioning with rapid service design and automated service activation capabilities. It's easy, intuitive pro-active fault and performance management make managing the complete service life cycle simple while reducing operating expenses. Converge™ is one of the first industry management platforms that integrates MEF defined CE 2.0 services and features template based provisioning that takes the complexity out of the provisioning process today while its open architecture and REST APIs provide a path forward for new software defined services and applications.

Product Features

- ▶ 24 x 100/1000Mbps SFP ports
- ▶ 4 x 10GE SFP+ ports
 - Any port can be network or client
- ▶ E-Line (EPL and EVPL)
 - E-LAN (EP-LAN and EVP-LAN)
 - E-Access (Access EPL and EVPL)
- ▶ Blended Ethernet Service Activation testing supporting RFC2544 and Y.1564 "services" testing via EVC bandwidth policies or CoS ingress and egress tags with 1-way delay measurements reported in 1-milliseconds
- ▶ Hardware based Precision Time Protocol 1588v2 with clock off-set reporting and monitoring between grandmaster and slave with nanosecond accuracy.
- ▶ Multi-CoS 802.1p and Ipv4/V6 DiffServ/TOS to ensure any level of service between operator and customer networks
- ▶ Hardware based Service OAM (IEEE 802.1ag) and Performance Monitoring (ITU Y.1731) ensure accurate service performance delivery with two and one-way delay measurement reporting.



Specifications

Standards	IEEE 802.3™ IEEE 802.3u IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 80.1AB IEEE 802.3ah IEEE 802.1ag IEEE 1588-2008 (v2) Precision Time Protocol (PTP) ITU G.8261 Synchronous Ethernet ITU Y.1731 PM
Maximum MAC Addresses	32K
Maximum Frame Size	10,056 bytes
Data Rates	100/1000Mbps and 10GE
Status LEDs	Power, Port Activity, Port Duplex
Dimensions	Width: 17.375" [441.325 mm] Depth: 10.0" [254 mm] Height: 2.625" [66.675 mm]
Power	Redundant, hot swappable AC 100-250VAC DC 21-72VDC
Environment	0 C° - 50 C° Operating Temp
Safety	UL listed
EMI	EN55022 Class A, CE
Warranty	5 Years Hardware
Support	TNCARE packages available for Technical Support, Hardware Support, Training and Consulting Services

Ordering Information

S4224

(24) 100/1000Mbps SFP ports with (4) 10G SFP+ ports includes IEEE 1588v2, SyncE & Service Activation Test generation

(Includes 19" Rack Mount ears does not include Power Supply, need to order separately)

Converge™

See Converge™ datasheet for details and part numbers

Optional Accessories

SFPs, copper Ethernet cables and fiber patch cables sold separately

Power Supplies

CES-PSU-AC

AC power supply for S4140, S4212 and S4224 (100-250VAC)

CES-PSU-DC

DC power supply for S4140, S4212 and S4224 (21-72 VDC)

Features

- ▶ Bandwidth policies enforced by rate limiting the port, VLAN ID or EVC with configurable CIR, CBS, EIR, EBS, with real-time green/yellow/red/discarded frame monitoring.
- ▶ ITU G.8031 linear APS and G.8032(v1 and v2) rings offer sub 50ms failover.
- ▶ Strong security authentication/verification including SSH/SSL RSA/DSA certificate generation, TACACS+, RADIUS, HTTPs, SNMP v1, v2c and v3 , up to 15 different levels of user administrative access rights
- ▶ IPv6 and IPv4 dual-stack addressing
- ▶ Dual firmware banks/images
- ▶ Configuration backup/restore
- ▶ Dying / Last gasp