Data Sheet FDX2460 Synchronous 10 Gigabit Ethernet Access Aggregation Switch

Low cost, small form factor solution for fibre access networks, including cabinet deployments

Overview

Fujitsu's FDX2460 is a wire speed non-blocking layer 2 switch with synchronisation and secure management. Providing a cost effective solution for Ethernet Aggregation in locations where space and power are limited, the FDX2460's ultra small (200 mm deep) form factor makes it ideal for deployment in the street cabinets used by Next Generation broadband access networks. Its support of Synchronous Ethernet also allows it to provide cost effective aggregation for LTE mobile backhaul. The FDX2460 supports 24 ports of synchronous 1 Gigabit Ethernet and 4 ports of synchronous 10 Gigabit Ethernet. This provides high bandwidth optical interconnect capability and low cost Gigabit Ethernet aggregation. The FDX2460 can also be deployed in a resilient configuration for high availability applications.

Blending Carrier and Enterprise Capabilities

A benefit of the FDX2460 is the blend of carrier Ethernet and Enterprise Ethernet features in a form factor that is cost optimised for access networks. This, combined with Fujitsu's long experience of broadband and fibre access delivery, provides carriers with a new powerful switching element on which to build new high bandwidth networks.

The FDX2460 can support a mix of provider bridging and point-to-point VLAN switching services, as well as consumer focused services such as multicast. This allows FDX2460 to provide cost effective aggregation for xDSL and point-to-point fibre deployments, whilst enabling connection and aggregation of business services at the cabinet. In a mixed environment, this capability allows a service provider to take opportunities to reach high value business services over the same infrastructure they are using for residential customers.

A Wide Range of Access Applications

The FDX2460 can be deployed in a large variety of business and residential applications. It can support open cabinet architectures and modular cabinet deployments, as increasingly required by EU regulators. Its support of Synchronous Ethernet and IEEE 1588v2 packet timing makes it a suitable platform for 3G and LTE mobile backhaul deployments. The unit also supports timing interfaces which can provide timing to (or recover timing from) other elements within the cabinet or hostel. The FDX2460 also supports the Broadband Forum TR-101 features for broadband access nodes, including PPP intermediate agent and layer 2 DHCP relay. This, combined with its low power consumption and small form factor, makes it suitable for deployment within Multiple Dwelling Units (MDUs) as a fibre distribution switch.

Secure Management

The FDX2460 supports management by CLI and SNMP. Because security in the access network is important, it also supports authentication via RADIUS and secure management communications using SSH and SFTP.



DC Variant



Technical Details

Ports and Bandwidth	24 GE/FE ports (SFP)	Resilience Options	Spanning Tree, RSTP, PVSTP+, MSTP
	2 10 GE ports (XFP)	Resilience options	IEEE 802.1AX Link Aggregation in
	2 10 GE ports (XFF) 2 10 GE ports (SFP+) - may be used		either load sharing or 1:1
	for client interfaces or switch stacking		protection configuration
	Wire speed, non-blocking switching		ITU-T G.8031/8032 (VLAN protection)
Ethernet Bridging	VLAN bridging 802.1Q		Unit protection option
Ethemet bridging	Provider bridging 802.1ad		(Active/Standby configuration
	16K MAC table entries		using stacking ports)
	Broadband Forum TR-101 N:1 VLANs	Multicast	4K multicast groups
	MEF E-TREE and E-LAN services	Multicast	IGMPv3 snooping and proxy reporting
Connection Oriented Ethernet	VLAN cross connect		Layer 2 and Layer 3
	Single or double tagged VLAN		multicast forwarding
		Broadband Access Node	Layer 2/3/4 ACL support
	Up to 512 connection oriented services	bioaubaliu Access Node	TR-101 PPPoE Intermediate Agent
	Metro Ethernet Forum E-LINE services		TR-101 Layer 2 DHCP relay
	Broadband Forum TR-101 1:1 VLANs		IEEE 802.1X MAC authentication
Quality of Service	Port and VLAN .1p bits and	Management	CLI/SNMPv3
	DSCP classification	Management	
	Ingress and egress per EVC,		Secure in-band management (SSH/SFTP) DHCP Client
	5 5 1		RADIUS
	per class, rate limiting		
	MEF 10 support		Environmental alarm support
	srTCM, trTCM	Physical and Factor and stall	Backup and restore
	Per class queuing (8 classes)	Physical and Environmental	//0.5.200./1.5.55
	SP/WFQ scheduling and per-class shaping	Dimensions (W x D x H)	448.5 x 200 x 41 mm
	Tail drop and WRED	Weight	3.8 kg
OAM	Port statistics and performance	Mounting	Horizontal and vertical
	management	Access	All front access for ease of deployment
	EVC statistics	Power	DC or AC
	IEEE 802.1ag CFM (CC, LB, LT)	Power Consumption	70 W (max)
	IEEE 802.3ah link-layer OAM	Temperature Range	-40 to +65 °C
	ITU-T Y.1731 performance monitoring	Compliance	ETSI EN 300-019 Class 3.2/4.1/4.1H
Synchronisation	2 MHz input and output interfaces		EMC ETS EN 300-386
	ITU-T G.8261/8262		EN 55022:2006+A1:2007
	(Synchronous Ethernet)		CE mark
	ITU-T G.8265.1 (PTP telecom profile)		ROHS6
	IEEE 1588v2 (packet timing)		WEEE

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