

VigorSwitchFX2120

Full Fibre 10 Gigabit Ethernet Layer 2+ Managed Switch with 12x SFP+ 10GbE Ports

Datasheet



DrayTek

Key Specifications

- 12x SFP+ 10GbE Ports
- 802.1q VLANs with Dynamic MAC-based, Voice & Surveillance VLAN
- VLAN Routing & Static Route with DHCP server / relay
- QoS for Application traffic prioritisation
- 802.1x RADIUS / TACACS+ Port Authentication with Accounting
- Voice VLAN (OUI Mode)
- Access Control List (ACL)
- Port Mirroring & Link Aggregation
- IGMP Snooping & Querying
- IPv4 and IPv6 Support with IP Conflict Prevention
- Centrally managed or standalone operation
- Console Port

Technical Specification (UK Hardware Spec.)

Physical Interfaces:

- 12 SFP+10GbE Ports – 10Gbps/1000Mbps
- Console Port (RJ-45 physical, RS-232 electrical)

VLAN:

- 802.1q Tag-based VLAN
- Port-based and MAC-based VLANs
- QinQ (Basic)
- GVRP – General VLAN Registration Protocol
- Up to 255 VLANs (out of 4096 VLAN IDs)
- 802.1v Protocol-Based VLAN
- Voice VLAN (OUI Mode)
- Surveillance VLAN (OUI Mode)
- Protocol VLAN
- MAC-based VLAN
- Management VLAN
- Port Isolation

QoS

- Support 8 priority queues
- Port-Based rate control (Ingress & Egress)
- Priority queue schedule (WRR or Strict Priority)
- Rate Limit
- Class of Service
- 802.1p CoS
- DSCP
- CoS-DSCP
- IP Precedence ToS

Network Security:

- IP Source Guard with ARP inspection
- Storm Control (Broadcast, Unknown Multicast, Unknown Unicast)
- DoS Attack protection
- AAA Authentication
- MAC Authentication
- Protected Port / Port Isolation
- Static Port Security
- Dynamic ARP Inspection
- DHCP Snooping with Option 82
- Loop Detection & Prevention
- Access Control Lists (ACL)
 - Up to 512 ACL Entries
 - Source and destination MAC
 - VLAN ID
 - IPv4/v6 address
 - Protocol
 - TCP/UDP port

Spanning Tree:

- Spanning Tree Protocol
- Rapid Spanning Tree Protocol
- Multiple Spanning Tree Protocol

Link Aggregation

- 8 Aggregation Groups
- Up to 8 ports in each group
- LACP or Static setup
- Supports traffic load balancing

Networking Performance:

- Switching Capacity: 240Gbps
- Forwarding Rate: 178.56 Mpps at 64 bytes
- MAC Addresses Supported: 32,000
- Jumbo Frames up to 12KB
- Jacket Buffer size: 16Mbit
- Layer 3 Routing Table: Up to 12k Entries

Multicast:

- Ping Check with Mail Alert on disconnection
- Up to 256 multicast groups
- Multicast Group Filtering / Throttling
- IGMP Snooping V2/V3 (BISS)
- IGMP V2/V3 Querier
- Multicast VLAN registration
- MLD Snooping V1/V2
- Immediate Leave
- Report Suppression
- IGMP/MLD Querier

AAA

- RADIUS / TACACS+ Authentication for Management
- Multiple AAA Server
- MAC / Inaccessible Authentication bypass
- RADIUS Authentication 802.1X
 - Accounting
 - Guest VLAN
 - Port based Authorisation
 - 802.1X Single/Multi
 - MAC-based
 - Web-based
- Attribute Assignment
 - User Privilege
 - VLAN
- TACACS+ Authentication
 - Part Authorisation
 - Accounting

ONVIF Surveillance

- Discovery of ONVIF-compliant IP Cameras
- Surveillance Topology
- Real-Time Video Streaming
- ONVIF Device Maintenance
- Device Information
- Network Settings Configuration
- Time Settings
- Reboot
- Reset to Factory Default Settings
- Ping Check with Mail Alert on disconnection

Diagnostics

- Port Status & Usage display
- CPU/RAM Usage display
- MAC Address Table
- Device Check
- Syslog
- Mail Alert
- Port Status
- Port Speed Change
- System Restart
- Device Check
- IP Conflict
- ONVIF IP Camera Snapshot
- Port Mirroring
- Ping Diagnostics
- Port-based Cable Test

Management

- Central Management
 - VigorACS
 - VigorConnect
 - Vigor Router Switch Management (requires router firmware support)
- OpenFlow
- Running/Startup/Backup Configuration
- sFlow
- IPv4 & IPv6 Dual-Stack
- LLDP(802.1ab) + MED
- Web User Interface (HTTP or HTTPS)
- Firmware Upgrade/Backup by HTTP/HTTPS
- HTTP (Non-TLS) can be disabled for increased security
- Configuration Backup/Restore
- Factory Default
- System Reboot
- Dual Firmware Image (Active & Backup Firmware)
- Command Line Interface (CLI) via SSH/Telnet
- Console Port (RJ45) for CLI management
- OpenVPN Client with Certificate-based auth
- SNMP v1, v2c, v3 (with Generic Traps)
- RMON Groups 1, 2, 3, 9 (History, Statistics, Alarms, Events)
- NTP (Simple Network Time Protocol)

Hardware Monitor

- Remote Monitoring through Web Interface & VigorACS *
- Hardware Monitor Data Recording & Graphing
- Email & LED alert on Fan failure, voltage high/low and overheat
- Temperature Monitoring
- Voltage Monitoring
- Smart Fan Control for low noise operation
- Power Saving Mode

Layer 3 Networking Feature

- Static Route
- VLAN Routing

IPv6 Features:

- Auto Configuration
- Static IPv6 Address & Prefix Length
- Static IPv6 Default Gateway
- IPv6 Neighbour Discovery (ND)
- IPv6 Duplicate Address Detection
- ICMPv6
- DHCPv6 Client

Technical Specification (UK Hardware Spec.)

General IEEE Standards Compliance:

- 802.3ab 1000Base-T
- 802.3ae 10GBase-T
- 802.3x Flow Control Capability
- 802.3 Auto-negotiation
- 802.3ad Port trunk with LACP
- 802.3az Energy Efficient Ethernet
- 802.3af PoE
- 802.3at PoE+
- 802.1q VLAN
- 802.1p Class of Service
- 802.1d Spanning Tree
- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree
- 802.1x Port Based Network Access Control
- 802.1ab Link Layer Discovery Protocol (LLDP)
- 802.1ad QinQ

Operating Requirements:

- Power Input Requirements: 100-240VAC @ 2A
- Power supply: Internal
- Maximum Input Power Consumption: 28.9 Watts
- Cooling: Fan
- Operating Temperature: 0 °C to 50 °C
- Storage Temperature: -20 °C to 70 °C
- Operating Humidity: 5% to 90% RH (non-condensing)

Physical Specifications:

- Dimensions: 441 x 197 x 44 mm (W x D x H)
- Rack mountable: 1U
- Weight: 2.67 kg (excluding SFP modules/cables)

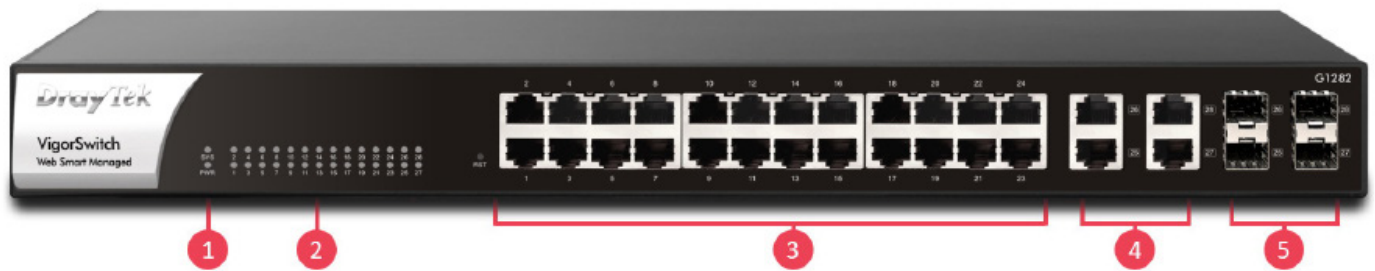
ROHS & CE Compliant

Warranty

- 2 Year Manufacturer's RTB
- Optional VigorCare Enhanced Warranty Available
 - VigorCare D3 3 Year Subscription: VCARE-D3
 - VigorCare D5 5 Year Subscription: VCARE-D5

Box Contents

- VigorSwitch FX2120 Network Switch
- UK IEC13 Power Cable
- 1U Rack Mount Fittings
- Quick Start Guide



1 System Status Indicators

2 Port Activity Indicators

3 24x 1GbE RJ-45 Ports

4 4x 1GbE RJ-45 Combo Ports

5 4x 1GbE SFP Combo Ports