

# Supported Features

## Summary of Supported Services

Table 1 Supported Layer 2 and Layer 3 Protocols

Category	Features
System Management and Administration	Support for clock/date setting and NTP (Network Time Protocol)
	Support for inbound IP access via any routed interface
	Support for DHCP (Dynamic Host Configuration Protocol); DHCP client, DHCP relay, DHCP Option82, and DHCP snooping
	Support for multiple local user accounts
	Support for SSHv2 (Secure Shell) protocol
	Ability to enable debugging for a specific module
	Support for Read Only and Read Write access SNMP (Simple Network Management Protocol)
	Support for IPFIX (IP Flow Information Export), monitors data flow in specified server
Device Configuration, Software, and File Management	Support the ability to save the configuration to flash on the device
	Support for configuration versioning and rollback; compares the two configurations, identifying differences
	Ability to import/export configuration files, device software, and logs from a file on a remote server (ftp/scp as options)
	Ping and Trace route tool from CLI (command line interface)
	SSH tool from CLI
	Ability to view and configure MAC/ARP (Address Resolution Protocol) table information
Layer 2 Forwarding and Protocol	Support for LLDP (Link Layer Discovery) protocols for detecting devices on a link
	Support for LACP (Link Aggregation Control) protocol and hashing of traffic using src/Dst (Source/Destination) MAC address, Src/Dst IP address, and Layer 4 port information and flag
	Support for 802.1q trunked interfaces, for both single and LAG (Link Aggregation Group) interfaces
	Support for 802.1q tagged/untagged interfaces and native tags
	Support for Q-in-Q
	Support for Jumbo Frame
	Support for 802.1d STP (Spanning Tree Protocol)
	Support for 802.1w RSTP (Rapid STP) and PVST (Per-VLAN STP)
	Support for 802.1s MSTP (Multiple Spanning Tree protocol)
	Support for functionality of BPDU (Bridge Protocol Data Unit) Guard / Filter/UDLD (Unidirectional Link Detection)
	Support for storm-control for unicast, multicast, broadcast
	Support for ingress/egress port mirroring
	Support for 802.1p in Layer 2 forwarding
	Support for Flow control per-interface
	Support for IGMP (Internet Group Management Protocol) snooping enable per-VLAN
Support for IGMP snooping query per-VLAN	
Layer 3 Forwarding and Routing Protocol	Full support for dual stacked IPv4 and IPv6 addressing.
	Support for 6 members in a Layer 3 LAG (Link Aggregation Group) interface

	Support for IPv4 and IPv6 static route configuration
	Support for OSPFv2 (Open Shortest Path First) IPv4 only
	Support for stub, normal, and NSSA (Not-So-Stubby Area) OSPF area types
	Support for up to 32 equal-cost routes in OSPF
	Support for RIP routing protocol
	Support for BGP (Border Gate Protocol) routing
	Support for 128 equal-cost routes in the device's routing/forwarding tables
	Support for ECMP (Equal-Cost Multi-path) routing with hashing of traffic using Src/Dst IP and Port
	Support the ToS and DSCP (Differentiated Services Code Point) in Layer 3 forwarding
	Support for IGMP v1/v2
	Support for PIM-SM (Protocol Independent Multicast Routing-Sparse Mode)
	Support for VRRP (Virtual Router Redundancy Protocol)