

Layer 3 Managed Ethernet Routing Switch

ETHERPATH ESS3228 is a Layer 3 Ethernet Routing switch developed with the performance, flexibility, manageability and unparalleled features required to address the Enterprise LAN and WAN applications expected in tomorrow networks.

ETHERPATH ESS3228 is a fully featured L2, L3 and L4 switch with 24 Fast Ethernet ports and 4 Uplink ports and an aggregate switching capacity of 12.8 Gbps. The two 1-port uplink interface cards are user-installed options. 1000Base T, 100Base FX and SFP plug-in cards are available.

The **ETHERPATH ESS3228** platform can accommodate additional CAM and Packet Buffer modules to support very large MAC forwarding and IP forwarding tables.

Features

- Twenty four (24) auto-MDIX 10/100 ports
- Gigabit interfaces options are: choice of gigabit interface cards (up to 2), plus 2 built-in SFP ports
- 12.8 Gbps switching fabric
- Layer 2 features including:
 - Learning, forwarding and aging
 - STP, Rapid STP*, and multiple STP*
 - MAC Filtering
 - MAC Port security
 - Port based and Protocol based VLAN, VLAN tagging, GVRP
 - Priority Queuing
 - Flow Control
 - Link Aggregation (8 Groups/8 Ports Each)
 - Port mirroring
 - Broadcast storm recovery
 - Head of Line Blocking Prevention
 - GMRP, IGMP Snooping

- 802.1x Access Control

ETHERPATH ESS3228 Series



- Layer 3 features including
 - IPv4 Routing
 - ARP, ARP proxy*, and RARP*
 - Multi-port Subnet-VLAN Routing
 - Static IP Routes
 - Multi-subnet Broadcast
 - CIDR, VLSM, Route Summarization
 - RIP1, RIP2
 - OSPFv2
 - BGP (Optional Software Feature)
 - Route re-distribution between RIP, OSPF, local, and static
 - IP Multicast (IGMPv2, DVMRP, PIM-DM, and PIM-SM) (Optional Software Feature)
 - VRRP
 - Router Discovery
 - Secondary IP Address Capability
 - Class of Services
- Layer 3+ and Additional Features
 - BOOTP/DHCP Relay
 - Bandwidth Allocation
 - Packet Filtering and Access Control List (ACL)
 - Network Address Translation (NAT)
 - Protection against Denial of Service (DOS)
- OAMP Features
 - BOOTP/DHCP
 - Software and Configuration Updates using TFTP, XMODEM
 - POST and Diagnostics
 - Syslog
 - User Interface (CLI, Telnet, WBI)
 - SSH and SSL*
 - RADIUS Based Authentication*
 - SNMP, RMON

ETHERPATH ESS3228 Series Specifications

<p>Ports</p> <ul style="list-style-type: none">• 24 Auto MDIX 10/100 Base-TX• Gigabit interfaces options are: choice of gigabit interface cards (up to 2), plus 2 built-in SFP ports <p>Capacity</p> <ul style="list-style-type: none">• 12.8 Gbps switch fabric• 9.5 Million PPS Packet Forwarding Rate• 8 Priority Queues• Up to 39K MAC addresses with 3 CAMs• Up to 38K IP Route with 3 CAMs• Up to 19K ARP Table with 3 CAMs• Up to 2K Multicast Route with 3 CAMs• Up to 2560 VLAN with 3 CAMs• Up to 512M Byte packet buffer• 128 ACL Lists <p>IEEE Standards</p> <ul style="list-style-type: none">• IEEE 802.1D Bridging, Spanning Tree, GARP, GMRP• IEEE 802.1Q VLAN Tagging• IEEE 802.3ac Frame Extension for VLAN Tagging• IEEE 802.1p Priority Queuing• IEEE 802.1s Multiple Spanning Trees• IEEE 802.1w Rapid Spanning Tree*• IEEE 802.1x Access Control• IEEE 802.3x Flow Control• IEEE 802.3ad Link Aggregation <p>IETF RFC MIBs</p> <ul style="list-style-type: none">• RFC 1213 – MIB II• RFC 1493 – Definitions of Managed Objects for Bridges• RFC 1573 – Evolution of the Interfaces Group of MIB-II• RFC 1643 – Ethernet MIB• RFC 1724 – RIP Version 2 MIB Extensions• RFC 1850 – OSPF Version 2 Management Information Base• RFC 2233 – The Interfaces Group MIB using SMIv2• RFC 2674 – Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and Virtual LAN Extensions (partially supported)• RFC 2787 – VRRP MIB• RFC 1757 RMON MIB• CyberPath Private MIB	<p>Management Features</p> <ul style="list-style-type: none">• CLI, WEB and SNMPv1, SNMPv2 and SNMPv3• Dedicated serial and 10/100Base-T management port• In-Band Management• RMON Groups 1,2,3 and 9 (Statistics, History, Alarm and Events)• On-line diagnostics• Firmware Upgrade using TFTP, X modem• Database backup and restoration• Local language support <p>LEDs</p> <ul style="list-style-type: none">• System Power• Self test• Fault• Link status (per port)• Activity (per port) <p>AC Input</p> <ul style="list-style-type: none">• AC Input 100V to 240V, 50 to 60Hz <p>Power Supply</p> <ul style="list-style-type: none">• Internal auto-ranging power supply• Redundant power supply (Optional) <p>Power Consumption</p> <ul style="list-style-type: none">• 73W max. <p>Heat Dissipation</p> <ul style="list-style-type: none">• 250 BTU/hr. <p>Size</p> <ul style="list-style-type: none">• 444mm X 355mm x 66mm• (17.47inx13.97inx2.5in) <p>Weight</p> <ul style="list-style-type: none">• 6.5 kg• 14.3 lbs <p>Operational Environment</p> <ul style="list-style-type: none">• Temperature 0 °C to 40 °C• Humidity 10% to 90% non-condensing• Storage -40 °C to 70 °C <p>Compliance</p> <ul style="list-style-type: none">• FCC Part 15• CE mark• UL	<p>Ordering Information:</p> <p>E00-10111-00: ESS 3228 With 0 CAM E00-10112-00: ESS 3228-1 With 1 CAM E00-10113-00: ESS 3228-3 With 3 CAM E00-10111-50: ESS 3228 –AMI With 0 CAM E00-10112-50: ESS 3228-1 –AMI With 1 CAM E00-10113-50: ESS 3228-3 –AMI With 3 CAM</p> <p>Uplink Interface Cards</p> <p>E10-80100-00: 1-port 1000 Base-TX E10-80110-03: 1-port 100 Base-FX SC MMF E10-80250-20: 1-port SFP card</p> <p>SFP Transceiver Modules</p> <p>E20-70251-01: 1000 Base SX, LC, SFP module E20-70281-01: 1000 Base LX, LC, SFP module</p> <p>Software Options</p> <p>E50-10100-00: -AMI BGP Routing, Multicasting Services Option</p> <p>Misc. Parts</p> <p>E90-10100-00: Rack Mount Kit E90-10200-00: Redundant Power Module E90-10301-00: 64M Byte Packet Buffer Module E90-10302-00: 256M Byte Packet Buffer Module E90-10303-00: 512M Byte Packet Buffer Module</p>
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* Available in future releases