

# Alpine® 3800 Series



*Alpine 3800 series switches allow new technologies with intelligent security and availability features to keep network convergence simple and manageable.*

## Features

- Ethernet Automatic Protection Switching (EAPS) for SONET-like resiliency
- Hardware-based Layer 2-4 Access Control Lists (ACLs) at wire-speed
- Policy-Based Quality of Service (QoS) at wire-speed to allocate bandwidth and prioritize traffic

## Target Applications

- Server farms with high density 10/100 and Gigabit traffic control requirements
- Secure, highly-available, simple converged networks with high-performance and QoS to enable VoIP and wireless applications
- PoE edge connectivity for IP Telephony and wireless access points

Alpine 3800 chassis switches deliver convergence enhancements to meet the needs of the continuously evolving network. As businesses adopt new technologies such as traffic management and Gigabit Ethernet to improve services and productivity, Alpine 3800 switches provide new networks that are simple to operate yet secure and reliable.

Alpine 3800 chassis switches offer total networking coverage, making them ideally suited for converged Unified Access networks, Metropolitan Area Networks (MANs), service provider and enterprise data centers, multi-tenant buildings and enterprise wiring closets. Alpine chassis switches support a comprehensive range of Ethernet connections including standard Category 5, fiber optic media, PoE and wireless access.

## High Availability

The Alpine 3800 series chassis support hot swappable I/O modules and fan trays along with fully redundant, hot swappable power supplies that ensure high availability. Alpine 3800 series chassis are NEBS Level 3 compliant and meet the highest level of quality demanded by network service providers around the world. Ethernet Automatic Protection Switching (EAPS) allows the IP network to provide the level of resiliency and uptime that users expect from their traditional voice networks. EAPS is superior to the Spanning Tree or Rapid Spanning Tree Protocols, offering sub-second (less than 50 milliseconds) recovery and delivers consistent failover. Alpine 3800 series switches constantly check for problems in the uplink connections using advanced Layer 3 protocols such as OSPF, VRRP and ESRP (ESRP supported in Layer 2 or Layer 3), and dynamically routes around the problem. Equal Cost Multipath (ECMP) enables uplinks to be load balanced for performance and cost savings while also supporting redundant failover.

## Extensive Traffic Management Capabilities

Extreme Networks revolutionary rate shaping capabilities provide Layer 3 IP/Ethernet networks that delivers a fixed latency, guaranteed transit path for

voice or video traffic equal to that achievable with ATM but at a fraction of the cost and complexity. This makes the implementation of VoIP or VOD or other delay sensitive traffic feasible, without requiring bandwidth over-provisioning. Extreme Networks ability to classify packets using Layer 1 through Layer 4 attributes regardless of whether traffic is being switched or routed, combined with the ability to also honor priorities assigned before the traffic entered their network as well as re-write the signaling attributes (i.e. DiffServ), gives service providers unique control of application and service quality. These advanced capabilities ensure high bandwidth management and congestion control.

## Comprehensive Security Features

VMANs allow service providers to securely preserve the integrity of their customers' data while mixing and matching traffic from multiple sources over the same shared backbone. Providing intrusion detection and prevention, the Alpine 3800 series switches support line-rate port mirroring. This can be used to mirror traffic to an external network appliance such as an intrusion detection device for trend analysis or be utilized by a network administrator as a diagnostic tool when fending off a network attack.

The Alpine 3800 series supports ACLs based on Layer 2, 3 or 4-header information such as the MAC address or IP source/destination address. The use of protocols like SSH2, SCP and SNMPv3 supported by a Alpine 3800 series switch prevents the interception of management communications and man-in-the-middle attacks.

Multiple supplicant (client) support on the Alpine 3800 enables multiple clients to be individually authenticated on the same port.

The IPDA SUBNET lookup feature reduces exposure to malicious users or virus infected end clients and accelerates packet forwarding.

## Ease of Management

Extreme Networks has developed tools that save you time and resources in managing your network. EPICenter® provides all fault configuration, accounting, performance, and security functions to manage Extreme Networks multilayer switching equipment in a converged network. EPICenter Policy Manager provides layer independent policy enforcement for Layers 1 – 4. Extreme Networks software application, ServiceWatch®, delivers powerful, Layers 4 – 7 monitoring and management for mission-critical network services.

Alpine 3800 Series Features	Benefits
Wire-speed non-blocking architecture on all ports	High-performance and throughput for maximum scalability
Policy-Based QoS with eight queues per port, bidirectional rate shaping and bandwidth management	Prioritize mission-critical applications and traffic to deliver maximum productivity; deliver delay-sensitive applications such as voice and video
ACLs, Network Login, DoS protection	Highest levels of security at the core of the network
High density 10/100/1000T connections	Smooth migration from 10/100 to Gigabit networks
Bidirectional rate shaping	Allows limiting and shaping of both ingress and egress traffic to a client based on bandwidth utilization
Link aggregation of up to 8 links in a single trunk with sub-second failover and fail-back capabilities	Resiliency through multiple links and higher bandwidth by logically making 8 links look like one
OSPF, RIPv1 and RIPv2, IP Multicast, BGP4 routing	Layer 3 redundancy for highest availability and throughput
Extreme Standby Router Protocol™ (ESRP), EAPS, Spanning Tree Protocol (STP) and Extreme Networks' STP extensions, link aggregation	Layer 3 and Layer 2 redundancy within network uplinks to ensure that failure in other equipment will not result in lost connectivity for users



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