

### **EX 3500 ETHERNET SWITCH**

## EQUIPPED THE WIRED ETHERNET SWITCH FOR UNIFIED WIRED-WIRELESS NETWORKS

**GET ALL THE WIRED NETWORKING FEATURES YOU NEED, PLUS THE SIMPLICITY OF A SINGLE POINT OF MANAGEMENT FOR ALL YOUR WIRELESS AND WIRED NETWORK INFRASTRUCTURE** The perfect complement for your Zebra WLAN, the EX 3500 addresses all the access layer needs in your branch and remote office deployments. This economical, standalone solution offers all the features you need in a wired access switch, with the advantages of centralized management through your Zebra WiNG-based NX Integrated Services Platforms. Now, not only can you easily support your wired networking requirements, you can also monitor and manage all your wired and wireless equipment with the simplicity of a single pane of glass, reducing management time and complexity.

Simplify the deployment and management of your wired and wireless network with the EX 3500 Ethernet Switch. For more information on the EX 3500, please visit <u>www.zebra.com/wlan</u> or access our global contact directory at <u>www.zebra.com/contact</u>

### **TECHNICAL SPECIFICATIONS**

PART NUMBERS		Layer-3 features Static routing MAX IPv4 unicast routes: 32	
EX-3524-0000-00-wr: 24	ge + 4sfp wired PoE/Po		
EX-3548-0000-00-wr: 48	ge + 4sfp wired PoE/Po		
			MAX ARP entries: 104
	EX 3524	EX 3548	Security and access control
PHYSICAL CHARA	CTERISTICS	DHCP Snooping	
Form factor	1U rack mount		Dynamic ARP inspection
Dimensions (WxDxH)	44.0 x 28.0 x 4.4 cm 17.32 x 11.0 x 1.73 in.	44.0 x 40.9 x 4.4 cm 17.32 x 16.10 x 1.73 in.	Proxy ARP
Weight	3.6 kg (7.83 lb.)	6.6 kg (14.55 lb.)	IP source guard
AC input	100-240 V, 50- 60hz, 6a	100-240 V, 50- 60hz, 12a	IP Filter (management ip filter for Telnet/ HTTP/SNMP access)



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#### FEATURES AND BENEFITS HIGHLIGHTS High performance GbE wired switch for your converged

- network
- Fixed configuration 24 GbE and 48 GbE ports for all the branch/low-density converged wired networking requirements.
- 4 front panel SFP GbE ports for upstream connectivity.

#### Comprehensive security features keep your network and data safe

- User access and authentication features include access control, standards-based 802.1x port-level access control, MAC authentication, MAC limiting.
- Threat detection features include DHCP snooping, Dynamic ARP inspection, Proxy ARP, IP source guard, Broadcast/multicast storm control, MAC based port security.

#### Easy and cost-effective deployment with Power-over-Ethernet ( PoE)

- Eliminates the cost of running power to wired devices, such as access points, IP phones and video cameras.
- PoE available on all ports, both 24 and 48 port models, simultaneously.
- Comprehensive protocol support for 802.3af/ 802.3at (PoE/PoE+) at 15.4W or 30W provides future proofing, ensuring

Power Budget (PoE)	Up to 370W	Up to 740W	Port security (mac based)
Ethernet Ports	24xGbE + 4x1G SFP	48xGbE + 4x1G SFP	Access control lists (512 entries)
ENVIRONMENTAL F	RANGES	Port-based acl	
Operating temperature 32° F to 122° f/0° c to 50° C			802.1x port authentication
Storage temperature	-40° F to 158°	f/-40° c to 70° C	Mac authentication
Operating altitude	4,004 m (13,136 ft .)	2,000 m (6,561ft.)	Mac limiting
Non-operating altitude	4572 m (	15,000 ft.)	Storm control: Broadcast, multicast traffic threshold
Operating humidity	10% to 90% (non-condensing)		Quality of service (QoS) and rate-limiting
Storage humidity	10% to 90% (n	on-condensing)	Scheduling: strict, strict-wrr, wrr
SWITCHING/LAYER	-2 THROUGHPUT	802.1p, dscp/ip precedence trust and marking	
Packet switching in Gbps	56	104	Queues per port: 4
Throughput in Mpps	41.664	77.376	Input/output rate limits (per port)
COMMON FEATURE	S	Port trunking/mirroring	
Optics and connectors		Mirroring: 6 sessions ( multi-source-to-one-destination)	
100BASE-FX: 100 mbps	at full duplex (SFP)	Static trunks (etherchannel compliant)	
1000BASE-T: 10/100 Mbp duplex	os at half/full duplex, 10	802.3ad: dynamic trunks (lacp)	
1000Base-SX/LX/LH: 100	00 Mbps at full duplex (	Number of lags supported: 12	
Layer-2 switching		Max number of ports/lag: 8	
MAX MAC addresses: 16	k	Multicast	
Jumbo frames (bytes): 10	k	IGMP snooping: 255 groups	
Number of VLANS: 4k (25	56 active)		IGMP: v1, v2, v3
Port-based-Vlan		Management/services	
MAC-based-VLAN		CLI	
Voice VLAN		Web interface	
Private VLAN: traffic segn	nentation	Out-of-band management : console port	
multicast VLan registratio	n	SSH v1, v2	
IEEE 802.1a/b link layer c	liscovery protocol (LLD	BOOTP client	
LLPD-MED with Voip inte	gration	DCHP client	
IEEE 802.1d: spanning tre	ee protocol	DNS client, proxy	
IEEE 802.1p: cos prioritiz	ation	Remote monitoring (RMON) groups 1,2,3,9	
IEEE 802.1v: protocol-bas	sed Vlan	Simple network time protocol (SNTP)	

that the EX 3500 you buy today can provide power to the PoE-enabled devices of the future.

#### Quality of Service ( QoS) ensures network performance

- Supports multi-layer QoS including 802.1p CoS and DiffServ standards for data /voice and video traffic and maintaining end-to-end traffic prioritizations.
- Scheduling policy options include Strict, WRR and Strict-WRR.

#### Auto-discovery and centralized remote management through your NX Integrated Services Platforms

- Industry standard LLDP ( Link Layer Discovery Protocol) and LLDP-MED ( Link Layer Discovery Protocol-Media Endpoint Discovery) enable auto discovery of devices, VLAN configuration and identification of power requirements for efficient power management.
  Remotely stage, configure.
- Remotely stage, configure, monitor and manage the wired EX 3500 through your NX Integrated Services Platforms, just like all of your wireless infrastructure, providing the simplicity of a single management windowpane for your entire wired and wireless network.

IEEE 802.1Q: VLAN tagging	Simple network management protocol ( SNMP): v1, v2, v3
IEEE 802.1Q-in-Q: VLAN stacking	RADIUS(client)
IEEE 802.1s: multiple spanning tree protocol (mstp)	TACACS+ (client)
Number of MST instances: 32	HTTP/HTTPS
IEEE 802.1w Rapid spanning tree protocol (rstp)	Logging: syslog
IEEE 802.1x: Port authentication	FTP/TFTP
IEEE 802.3: 10Base-t	Telnet
IEEE 802.3u: 100Base-t	Troubleshooting
IEEE 802.3ab: 1000Base-t	Diagnostics: show and debug commands
IEEE 802.3z: 1000Base-x	Traffic mirroring (port-mirroring)
IEEE 802.3af: PoE	
IEEE 802.3at: PoE+	

IEEE 802.3ad: Link Aggregation Control Protocol (LACP)

### ZEBRA WLAN UNLEASH OPTIMAL



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