

# ZebraNet® Print Server Family

Ethernet Connectivity Solutions for Zebra® Bar Code Printers



## Advanced Connectivity for Advanced Printers

How do you make Zebra bar code printers even better? Add ZebraNet print servers, which deliver enhanced connectivity solutions to meet the needs of evolving network environments.

## Zebra Everywhere and Anywhere

Need location-independent printing minus the hassle and cost of recabling? Use the 802.11b/g compliant ZebraNet Internal Wireless Plus and ZebraNet Wireless Plus, with advanced authentication and encryption protocols, to enjoy ultimate mobility with reliable network and data security. Or—attach your printers to an external, 802.11g ZebraNet PS4000™ wireless print server.

For flexible connectivity options, get ZebraNet 10/100 Print Server for 10Base-T, 100Base-TX, and fast Ethernet 10/100 auto-switching networks, or the ZebraNet PrintServer II for cost-effective Ethernet connectivity to 10Base-T and Novell IPX/SPX networks.

## High-Speed Printing and Networking

Rely on Zebra to meet your high-speed printing and networking needs. All ZPL®-based Zebra printers enabled with ZebraNet print servers offer optimal integration for today's network environment with easy setup and configuration via Zebra advanced printer management tools.

Zebra now offers you a choice in print server products to make the world's best printers even better:

- Flexible 10/100 Ethernet connectivity for high-performance and industrial-strength printers
- Secure wireless network connectivity for location-independent printer operations anytime, anywhere
- The new PS4000 makes any desktop or tabletop printer wireless, enabling a cart-based mobile solution
- 10Base-T Ethernet connectivity for value-priced, compact desktop printers
- Effortless installation and centralized connectivity and control via Zebra advanced printer management

# ZebraNet Print Server Family



## ➔ ZebraNet Internal Wireless Plus and Wireless Plus

## ➔ ZebraNet 10/100 Print Server

ZebraNet Internal Wireless Plus and ZebraNet Wireless Plus offer a high level of wireless security for *XIIIPlus™*, 105SL™, S4M™, and ZM400™/ZM600™ printers (plus PAX4™ print engines with ZebraNet Wireless Plus) for flexible re-configuration of printers as business needs require. Compatible with Zebra's wireless mobile printers, the ZebraNet Internal Wireless Plus has an internal, theft-resistant radio that doesn't require you to buy a separate card. Tethered antenna optimizes reception; magnetic mount available later this year.

ZebraNet 10/100 Print Server is available in an internal or external version that provides a complete wired solution for 10Base-T, 100Base-TX, and fast Ethernet 10/100 auto-switching networks. When paired with the industrial-strength Zebra *XIIIPlus™*, 105SL, S4M, Z4Mplus™ / Z6Mplus™ and ZM400/ZM600 printers with enhanced ECP parallel support, it offers greater data transmission speeds for faster throughput.

### OPERATING CHARACTERISTICS

#### Wireless Network Connection

Wireless network compatibility - IEEE 802.11b/g

Data Rates Supported - 1, 2, 5.5, 11, and 54 MB per second

Wireless Medium DSSS (Direct Sequence Spread Spectrum)

Frequency Band - 2.4 to 2.4897 GHz

#### Radio Cards (Wireless Plus)

See page 4 for selected Cisco® and Motorola® radio card models.

#### Security

Refer to radio card securities supported on page 4.

#### Network/Print Server Connection

Auto senses IEEE- 802.3, Ethernet II, IEEE- 802.2, and IEEE 802.2/SNAP frame formats

#### User Interface

Link Status Indicator—real-time display of the printers network status.

Wireless Signal Indicators

### ADDITIONAL TOOLS SUPPORT

Configuration via ZebraNet™ Bridge Enterprise remote printer management software and Telnet

### OTHER FEATURES

#### Power

Power provided by the printer

#### Environment

Operates to the environmental specifications of the printer.

#### Agency Approvals

Safety: UL 1950; IEC 950; CSA 950-95; EN 60950; 1995 CE: CISPR 22 (-B); CE Compliance; EN 55024:1998; EN 61000-3-2, -3-3 FCC: (Class B – *XIII* only); FCC (Class A – *XII*); Canadian Doc. (Class A)

#### Internal Wireless Plus is available for use in the following countries:

Australia, Canada, European Union, United States, New Zealand

#### Warranty

One year

### OPERATING CHARACTERISTICS

Auto senses IEEE- 802.3, Ethernet II, IEEE- 802.2, and IEEE 802.2/SNAP frame formats

Ethernet 10Base-T and 100Base-TX UTP RJ45 connection

Auto senses full- and half-duplex communications

#### Printer Connection

Bi-directional, IEEE- 1284 Centronics® parallel port (Compatibility, Nibble, and ECP)

#### User Interface

Test button: diagnostic test and configuration printing  
Activity indicators: bi-color display of operational status; bi-color display of speed and network activity

#### Electrical

Maximum 750mA at 5.25VDC

Nominal 475mA at 5VDC

Power provided by the printer (Centronics pin 18, 5VDC at 475mA)

### OTHER FEATURES

Physical Characteristics

Width: 2.8" / 71.12 mm

Length: 3.2" / 81.28 mm

Height: 1.2" / 30.48 mm

Weight: 2.7 oz / 77 g

#### Environment

Operating Temperature: 32° F/0° C to 104° F/40° C

Storage Temperature: -40° F/-40° C to 140° F/60° C

Operating Humidity: 25 to 85% non-condensing

Storage Humidity: 5 to 85% non-condensing

#### Agency Approvals

CISPR 22 Class B; Canadian Doc.; FCC Class B; EN55024; AS/NZS3548

#### Warranty

One year



ZebraNet Internal Wireless Plus installed on a Zebra *XIIIPlus* printer



ZebraNet Internal Wireless Plus optional tethered antenna

# ZebraNet Print Server Family



## → ZebraNet PrintServer II

ZebraNet PrintServer II is ideal for desktop printers on a 10Base-T or Novell® IPX/SPX network and offers easy remote management for ZPL-based printers via Zebra printer management. This external print server conveniently connects to the printer's parallel port and obtains power directly from the printer—external power supplies not required!

### OPERATING CHARACTERISTICS

Auto senses IEEE- 802.3, Ethernet II, IEEE- 802.2, and IEEE 802.2/SNAP frame formats

Ethernet 10Base-T UTP RJ45 connection

### Printer Connection

Bi-directional, IEEE- 1284 Centronics parallel port (Compatibility, Nibble, and ECP)

### User Interface

Test button: diagnostic test and configuration printing

Activity indicators: bi-color display of operational status

### Electrical

Power provided by the printer (Centronics pin 18, 5VDC at 200mA)

### ADDITIONAL SYSTEM SUPPORT

#### Novell NetWare®: Netware 3 and 4 (NDS and Bindery)

Simultaneous support for NetWare NDS and NDPS; Novell Generic Gateway and HP® Printer Gateway; Dedicated Print Server and remote Print Server modes. Up to eight file servers and 32 queues; Print Protocols and Methods: IPX: NDS, SPX, Pserver, SPX Direct Print

### OTHER FEATURES

Physical Characteristics

Width: 2.5" / 63.5 mm

Length: 3.6" / 91.4 mm

Height: .8" / 20.3 mm

Weight: 2.5 oz / 71 g

### Environment

Operating Temperature: 32° F/0° C to 104° F/40° C

Storage Temperature: -40° F/-40° C to 140° F/60° C

Operating Humidity: 25 to 85% non-condensing

Storage Humidity: 5 to 85% non-condensing

### Agency Approvals

CISPR 22 Class B; Canadian Doc.; FCC Class B; EN55024; AS/NZS3548

### Warranty

One year



## → ZebraNet PS4000

ZebraNet PS4000 takes Zebra desktop, tabletop, or RFID printers—and even USB 2.0-enabled laser or inkjet printers—and turns them into a mobile solution wherever you need to go wireless.

With secure 802.11g wireless connectivity for up to four USB devices, the new ZebraNet PS4000 wireless print server eliminates the hassle of installing wires around a retail or warehouse operation.

### OPERATING CHARACTERISTICS

#### Connectivity

IEEE 802.11g (CF format)

Four TCP/IP ports

10-pin RS232 communications port for setup

#### Security

802.11i/WPA2, EAP-TLS, EAP-TTLS, IEEE 802.1X Authentication schemes, WPA-PSK, WPA-LEAP, WPA-PEAP, WPA-EAP/FAST, VPN, and more!

#### User Interface

6 LED indicators for printer status.

Optional LCD for monitoring network and battery status.

#### Memory

8 MB RAM and 4 MB Flash

#### Power

AC adapter

Server Input Range: 10V nominal to 24V nominal

Wide DC input voltage allows various powered carts or LA-24 battery pack compatibility

### OTHER FEATURES

#### Environment

Vibration resistant for cart-based environments

Operating Temperature: 32° F/0° C to 104° F/40° C

Storage Temperature: 14° F/0° C to 104° F/40° C

Operating and Storage Humidity: 20% to 80%, non-condensing.

#### Agency Approvals

United States (FCC), Industry Canada (IC), Australia/New Zealand (C-Tick), Mexico (NOM/NYCE), EU/EFTA (CE)

#### Warranty

One year

# ZebraNet Print Server Family

## ZEBRALINK™ SOLUTIONS

### Software

ZebraDesigner™ Pro  
 ZebraDesigner for XML  
 ZebraNet™ Bridge Enterprise  
 ZebraNet Utilities v 7.0  
 Zebra Universal Driver

### Networking

ZebraNet Internal Wireless Plus  
 ZebraNet Wireless Plus  
 ZebraNet 10/100 Print Server  
 ZebraNet PrintServer II  
 ZebraNet PS4000 Wireless Print Server

### Firmware

ZPL® and ZPL II®  
 Web View  
 Alert

## STANDARD FEATURES

Logical Printer Support  
 SMTP  
 POP3  
 Zebra MIB Support

## SYSTEM

### Microsoft® Windows® 95/98/Me/NT/2000/XP

Client mode for peer-to-peer printing via TCP/IP  
 Print Protocols and Methods (all simultaneously active): TCP/IP: LPR/LPD, Telnet, FTP, IPP v1.0, Raw printer port (port 9100)

### UNIX®, Linux®, Novell®, and Other Systems Supporting TCP/IP

Print Protocols and Methods (all simultaneously active): TCP/IP: LPR/LPD, Telnet, FTP, IPP v1.0, Raw printer port (port 9100)

## ADMINISTRATION PROTOCOLS

TCP/IP: ARP, RARP  
 TCP/IP and UDP: DHCP, BOOTP, SNMP v1.0  
 HTML v3.2  
 HTTP v1.0

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 Note: Not all products are available in all countries. Contact your Zebra representative for availability.

## Compatibility Matrix

Current Printer Models**	ZebraNet Internal Wireless Plus	ZebraNet Wireless Plus	ZebraNet 10/100 print server	ZebraNet PrintServer II	ZebraNet PS4000 Wireless Print Server
Xi™ series	1, 2, 4	1, 2, 4	1, 2, 3, 4	1, 3, 4	3
PAX4™ series		1, 2, 4	1, 2, 3, 4	1, 3, 4	3
105SL™	1, 2, 4	1, 2, 4	1, 2, 3, 4	1, 3, 4	3
ZM400™/ZM600™	1, 2, 4	1, 2, 3	1, 2, 3, 4	3, 4	3
Z4Mplus™/Z6Mplus™			1, 2, 3, 4	1, 3, 4	3
S4M™	1, 2, 4	1, 2, 4	1, 2, 3, 4	3	3
R110Xi™		1, 2, 4	1, 2, 3, 4	1, 3, 4	3
R170Xi™		1, 2, 4	1, 2, 3, 4	1, 3, 4	3
R110PAX4™			1, 2, 3, 4	1, 3, 4	3
R4Mplus™			1, 2, 3, 4	1, 3, 4	3
R2844-Z™				2, 3, 4	3
TLP 2844™ and LP 2844™				2, 3	3
TLP 2844-Z™ and LP 2844-Z™				2, 3, 4	3
TLP 2824™ and LP 2824™				2, 3	3
TLP 3842™				2, 3	3
TLP 3844-Z™				2, 3, 4	3

1 - Internal, field kit 2 - Internal, factory option 3 - External, field kit 4 - ZebraLink compatible  
 \*\* Only currently selling products. Go to [www.zebra.com](http://www.zebra.com) or ask your Zebra reseller for more details.

## Securities Supported

	ZebraNet Internal Wireless Plus	Cisco CB21	Cisco 350 LA-4121	Motorola LA-4137CF	Motorola
Open	Yes	Yes	Yes	Yes	Yes
EAP-FAST	Yes	Yes	Not Supported	Yes	Yes
EAP-TLS	Yes	Yes	Not Supported	Yes	Yes
EAP-TTLS	Yes	Yes	Not Supported	Yes	Yes
Kerberos	Not Supported	Not Supported	Not Supported	Yes	Yes
LEAP	Yes	Yes	Yes	Yes	Yes
PEAP	Yes	Yes	Not Supported	Yes	Yes
WEP (40 bit and 128 bit)	Yes	Yes	Yes	Yes	Yes
WPA - LEAP	Yes	Yes	Yes	Yes	Yes
WPA - PSK	Yes	Yes	Yes	Yes	Yes
WPA- EAP-FAST	Yes	Yes	Yes	Yes	Yes
WPA- EAP-TLS	Yes	Yes	Yes	Not Supported	Yes
WPA- EAP-TTLS	Yes	Yes	Yes	Not Supported	Yes
WPA- PEAP	Yes	Yes	Yes	Yes	Yes
WPA2 - LEAP	Yes	Yes	Not Supported	Not Supported	Not Supported
WPA2 - PSK	Yes	Yes	Not Supported	Not Supported	Not Supported
WPA2- EAP-FAST	Yes	Yes	Not Supported	Not Supported	Not Supported
WPA2- EAP-TLS	Yes	Yes	Not Supported	Not Supported	Not Supported
WPA2- EAP-TTLS	Yes	Yes	Not Supported	Not Supported	Not Supported
WPA2- PEAP	Yes	Yes	Not Supported	Not Supported	Not Supported

Products/Firmware: V60.15.x, PAX4, XiIIIPlus, 105SL, V53.15.x, ZM400, ZM600, S4M

\* Key rotation for WPA-PSK is supported in firmware version V60.15.6Z and later and in firmware version V53.15.6Z and later.



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