ZebraNet®
Print Server Family

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, for cost–effective Ethernet connectivity to 10/100Base 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 Internal Wireless Plus and ZebraNet Wireless Plus offer a high level of wireless security for *Xi*™, 105*SL*™, S4M™, ZM400™/ZM600™, *PAX*4, R*Xi*™, RZ400™/RZ600™, R*PAX* printers 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 with magnetic mount can optimize reception by enabling the user to position the antenna in a manner to improve signal quality.

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.

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 – *Xi*III only); FCC (Class A – *Xi*II); Canadian Doc. (Class A)

ZebraNet Internal Wireless Plus Availability
ZebraNet Internal Wireless Plus print server is not available in all countries. Contact your Zebra representative for availability.

Warranty
One year

ZebraNet Internal Wireless Plus installed on a Zebra *Xi*III*Plus* printer

ZebraNet Internal Wireless Plus optional tethered antenna

ZebraNet 10/100 Print Server

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 *Xi*, 105*SL*, S4M, Z4Mplus™/ Z6Mplus™ and ZM400/ZM600, R*Xi*, RZ400/RZ600, R*PAX* printers with enhanced ECP parallel support, it offers greater data transmission speeds for faster throughput.

Operating Characteristics
• 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 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 USB 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

Specifications at a Glance

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 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, 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, FTP, IPP v1.0**, Raw printer port (port 9100)

** IPP v1.0 is only available with some print servers

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

*Specifications subject to change without notice.

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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 PS4000 Wireless Print Server
Xi4™ series	1, 2, 4	1, 2, 4	3, 5	3
XiIIIPlus™ series	1, 2, 4	1, 2, 4	1, 2, 3, 4	3
PAX4™ series	1, 2, 4	1, 2, 4	1, 2, 3, 4	3
105SL™	1, 2, 4	1, 2, 4	1, 2, 3, 4	3
ZM400™/ZM600™	1, 2, 4	1, 2, 3	1, 2, 3, 4	3
Z4Mplus™/Z6Mplus™		1, 2, 4	1, 2, 3, 4	3
S4M™	1, 2, 4	1, 2, 4	1, 2, 3, 4	3
R110Xi™/ R170Xi™	1, 2, 4	1, 2, 4	1, 2, 3, 4	3
R110PAX4™	1, 2, 4		1, 2, 3, 4	3
R2844-Z™				3
TLP 2844™ and LP 2844™				3
TLP 2844-Z™ and LP 2844-Z™				3
TLP 2824-Z™ and LP 2824-Z™				3
TLP 2824Plus™ and LP 2824Plus™			2, 3, 4*	3
GK420t™ and GK420d™			2, 4*	3
GX420t™ and GX420d™			2, 4*	3
GX430t™			2, 4*	3

1 - Internal, field kit   2 - Internal, factory option   3 - External, field kit
4 - ZebraLink compatible (*G-Series & 2824Plus when used with ZPL)   5 - Internal, standard
** Only currently selling products. Go to www.zebra.com or ask your Zebra reseller for more details.

Securities Supported

	ZebraNet Internal Wireless Plus	Cisco CB21	Cisco 350	Motorola LA-4121	Motorola LA-4137CF
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.