900MHz mini PCI Wireless LAN Module

Zcomax Technologies, Inc. has released its new line of Air Runner™ wireless LAN mini-PCI cards. The GZ-901 is a 900MHz OFDM / DSSS mini PCI module based on 802.11 standards that has been designed with the integration market in mind. With it's external SMA antenna connector and standard mini PCI form, the GZ-901 will fit into any design that supports the mini-PCI bus. The GZ-901 is a high performance module that has bandwidth selectable flexibility allowing you to to choose from 5MHz, 10MHz and 20MHz bandwidths.

The GZ-901's reliable design helps to reduce overall costs associated with wireless integration by eliminating the need for debugging and driver support commonly associated with the designing a product from the *"ground up"*. The GZ-901 module is a robust plug and play ready device that has support for both Windows and Linux operating systems. Custom drivers are also available to suit your integration needs.

With an excellent price / performance ratio and the field-proven reliability associated with the Atheros chipset, the GZ-901 is a superb choice for any wireless application requiring enhanced connectivity and reliability.

GZ-901 at a glance

- **900 MHz OFDM / DSSS Radio**
- **25 dBm Tx output Power**
- **-72 dBm @ 54Mbps Rx Sensitivity**
- **1 SMA Female Antenna Connector**
- **32-bit mini-PCI Interface**
- **FCC and ROHS compliant**
- **Chipset – Atheros AR5414**
- **RoHS Compliant**
- **Driver support – Windows, Linux and customized drivers are available.**

ATHEROS® COMMUNICATIONS

RoHS Compliant

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Physical Specification:

Interface	32-bit Mini PCI
Dimensions (L x W x H)	65.93mm(L) * 59.6mm(W) * 4.15mm (H) *Dimension does not include antenna connector*
Weight	≤ 50 g

RF Specification:

Frequency Range (GHz)	Available - 868MHz ~ 928MHz
	FCC: 905 – 925 MHz
Transmitter Output Power	25dBm ± 1.5dBm @ 6-24Mbps
	22dBm ± 1.5dBm @ 36Mbps
	21dBm ± 1.5dBm @ 48Mbps
	20dBm ± 1.5dBm @ 54Mbps
Antenna Impedance	50 ohms
Channel Bandwidth	5MHz, 10MHz, 20MHz
802.11g Data rates	54, 48, 36, 24,12,9,6 Mbps
Modulation	48/54 Mbps(QAM-64), 24/36Mbps(QAM-16) 12/18 Mbps (QPSK) , 6/9 Mbps (BPSK)
Receiver Sensitivity @ PER < 10% for 802.11g	54 Mbps: ≤ -72 dBm ± 2 dBm
	6 Mbps: ≤ -92 dBm ± 2 dBm

Electrical Specification:

Supply Voltage	3.3 Vdc, +/- 5%
Supply Voltage Ripple	120mV (pp) max.
Power consumption	TX: < 1100mA, RX: < 600mA,

Antenna Connector Specification

Connector Type	1 SMA Female connector

Environmental

Working Temperature	-20 ~ 75ºC, 5 ~ 95% R.H. (non-condensing)
Storage Temperature	-40 ~ 85ºC, 5 ~ 95% R.H. (non-condensing)

Security

Policies Available	AES, TKIP, WEP, WPA

Warranty

The GZ-901 is supplied with a 12 month warranty against manufacturing defects.