

### 802.11g (54Mbps) High Power Wireless LAN Module

Zcomax Technologies, Inc. has released its new line of IEEE 802.11g Air Runner™ wireless LAN Access Points. The XG-580+ is a high performance access point with Repeating and Station functions, making it a versatile and cost effective solution for all of today's wireless needs.

The XG-580+ 802.11g Multi-Function Access Point supports multiple clients in Station, "client", mode with or without MAC cloning. The unit also features support for use as a DHCP client, allowing the AirRunner 802.11g IP resources to be centrally managed.

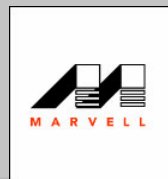
Designed specifically for the Embedded, Wireless ISP and IT markets to provide wireless broadband network services of up to 54Mbps, the AirRunner 802.11g AP series delivers outstanding network availability and radio performance.

Typical integration usages include Wireless ISP CPE, WLAN public "hot spot", satellite office WAN, mobile internet POP, and school campus networks. The AirRunner series is also the solution of choice for linking networks that are impossible or difficult to connect using wired alternatives, including networks separated by difficult terrain, or bodies of water.



### *XG-580+ at a glance*

- IEEE 802.11g compliant
- 20 dBm Tx output Power
- -65 dBm @54Mbps Rx Sensitivity
- MMCX Rev. Pol. Antenna Connector
- 10/100 LAN port with auto-MDIX
- FCC and ROHS compliant
- MAC / Baseband – Marvell 88W8510
- Radio - Marvell 88W8510
- Windows Utility



**Physical Specification:**

Host Interface	1 10/100 Base T RJ-45 Connector with auto-MDIX
Dimensions (L x W x H)	W=80.9mm , L=108.2mm , H =29.8mm
Weight	<78g

**RF Specification:**

Frequency Range (GHz)	North America: 2.412 ~ 2.462	
	Japan TELEC: 2.412 ~ 2.484 802.11b	
	Japan TELEC: 2.412 ~ 2.472 802.11g	
	Europe ETSI: 2.412 ~ 2.472	
	Spain: 2.457 ~ 2.462	
Frequency Drift	<25KHz	
Transmitter Output Power	20 dBm (100mw) @1,2,5.5 and 11Mbps	
802.11b		
802.11g		
54Mbps		12 dBm (16 mw)
48 Mbps		12 dBm (16 mw)
36 Mbps	12dBm ( 16 mw)	
6 Mbps	12dBm ( 16 mw)	
Antenna Impedance	50 ohms	
Media Access Protocol	CSMA/CA w/ACK	
802.11b Data rates	11, 5.5, 2, 1 Mbps	
802.11g Data rates	54, 48, 36, 24,18,12,9,6 Mbps	
Modulation	48/54 Mbps (QAM-64) 24/36 Mbps (QAM-16) 12/18 Mbps (QPSK) 6/9 Mbps (BPSK)	
Receiver Sensitivity	54 / 48 Mbps: -65dBm / -66dBm	
	36 / 24 Mbps: -70dBm / -74dBm	
@ PER < 10% for 802.11g	18 / 12 Mbps: -77dBm / -79dBm	
	9 / 6 Mbps: -81dBm / -82dBm	
@ PER < 8% for 802.11b	11 / -80dBm / -80dBm	

**Electrical Specification:**

Supply Voltage	5 Vdc, +/- 5%
Supply Voltage Ripple	120mV (pp) max.
Power-on startup time	<600 ms
Sleep-to-receive startup time	<75 ms
Power consumption	
802.11b	TX: ≤ 500mA/802.11b, RX: ≤ 250mA,
802.11g	TX: ≤ 500mA/802.11g, RX: ≤ 250mA,

**Antenna Connector Specification (supports Diversity)**

Connector Type	MMCX Reverse Polarity Jack
Manufacturer	Molex

**Environmental**

Working Temperature	0 ~ 60°C, 95% relative humidity (non-condensing)
Storage Temperature	-20 ~ 80°C, 95% relative humidity (non-condensing)

**Absolute Maximum Rating**

Stress above those listed in Absolute Maximum Rating may cause permanent damage to the device. This is a stress only rating and operation of the device at these or any other conditions above those indicated in standard specifications is not implied.

Supply Voltage	5.25V
Storage Temperature	-20 ~ +80°C, 95% relative humidity (non-condensing)
Barometric Pressure	740 hPa ~ 1050 hPa

### *International Frequencies*

Regulatory requirements at different countries mandate different operating frequencies (channels).

Allowable channels for each typical Domains are listed below.

Domain	Allowable channels
Africa	Channels 1 ~ 13
Asia	Channels 1 ~ 13
Australia	Channels 1 ~ 13
Europe	Channels 1 ~ 13
France	Channels 10 ~ 13
Israel	Channels 5 ~ 7
Japan	Channels 1 ~ 13
Mexico	Channels 11
South America	Channels 1 ~ 13
United States of America	Channels 1 ~ 11

### Feature List

#### Function

	Station	AP	AP Repeating
AP List	Y		
Station List		Y	Y
Rescan	Y		
Country Region	Y	Y	Y
Roaming	Y		
Link Status (WEB)	Y		
Factory Default (WEB)	Y	Y	Y
Firmware Upgrade (WEB)	Y	Y	Y
MAC Clone	Y		
DHCP Client	Y	Y	Y
WINS support	Y	Y	Y
Multiple Client support	Y		
WEB Based Management	Y	Y	Y

#### Protocol List

	Station	AP	AP Repeating
TCP/IP	Y	Y	Y
IPX/SPX		Y	Y
NetBEUI		Y	Y