

IEEE 802.11g CF Compact Flash Adapter

Zcomax Technologies, Inc. has released its new line of Air Runner™ wireless LAN Compact Flash adapters. The XG-838 is an IEEE 802.11g 54Mbps adapter that has been designed with the integration and vertical markets in mind. With a low profile and efficient integrated antenna, the XG-838 will fit into any design that has a compact flash host interface. The XG-838 is a high performance adapter that exceeds both IEEE 802.11g and FCC regulatory requirements.



The XG-838's design was selected to help reduce the overall costs associated with wireless Compact Flash modules by allowing a single unit to interface with multiple hardware platforms thus eliminating the need for custom designs to fit existing product lines. The XG-838 adapter is a robust plug and play ready device that supports windows CE, PPC2003 and Linux.

With an excellent price / performance ratio and the field-proven reliability associated with the Marvell chipset, the XG-838 is a superb choice for any wireless application requiring both quality and reliability.

XG-838 at a glance

- IEEE 802.11g compliant
- 18 dBm Tx output Power
- -82 dBm @ 6Mbps Rx Sensitivity
- Integrated Ceramic Antenna
- CF host interface via 50 pin Nais AXK850145Y connector
- FCC and ROHS compliant
- MAC / Baseband – Marvell 88W8385
- Radio - Marvell 88W8010
- Driver support – Linux, CE and customized drivers are available.



Physical Specification:

Host Interface	Compact Flash
Dimensions (L x W x H)	56mm(L) * 42mm(W) * 5mm (H)
Weight	≤ than 10 g

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	
IEEE 802.11b	18 dBm
IEEE 802.11g	16 dBm
Antenna	2 Ceramic Integrated Antenna's
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, 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: -73dBm / -73dBm
	36 / 24 Mbps: -74dBm / -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	3.3 Vdc, +/- 5%
Power consumption	TX: <480mA/802.11b, RX: <270mA,
802.11b	
802.11g	TX: <480mA/802.11g, RX: <270mA,
Power Save mode current	<11 mA
Sleep mode current	<1.2 mA
LED Indicators	Power and Link

Environmental

Working Temperature	0 ~ 6°C, 95% relative humidity
Storage Temperature	-40 ~ 85°C, 95% relative humidity
ROHS Compliant	Yes – Pb free

Security

The XG-838 supports the following security features according to the latest Marvell driver

- Linux Driver 5.0.1.0 – WPA-PSK TKIP, WPA, WPA2, IEEE 802.1x
- Windows CE 4.2 Driver 3.4.0p6.25 – WPA-PSK, IEEE 802.1X

Reliability(MTBF)

Mean Time to Failure is rated at 150,000 hours.

Interoperability

The XG-838 interoperates with any IEEE 802.11g or 802.11b compliant devices.

Warranty

The XG-838 is warranted to up to 12 months against manufacturing defects.