

IEEE 802.11b (11 Mbps) USB Stick Module

Zcomax Technologies, Inc. has released its new line of Air Runner™ wireless USB adapters. The XI-735 is an 802.11b 54Mbps USB stick module that has been designed with the integration market in mind. With its integrated antenna design and standard USB 2.0 form, the XI-735 will fit into any design that has a USB host interface. The XI-735 is a superior USB module that exceeds both IEEE 802.11b and FCC regulatory requirements.

The XI-735's integrated antenna design helps to reduce overall costs associated with wireless by eliminating the need for additional jumper cables and antennas, while maintaining its overall quality. The XI-735 USB device is a robust plug and play ready module that supports all major Windows operating systems as well as Linux. Custom drivers for windows CE are also available upon request.

With an excellent price / performance ratio and field-proven reliability associated with the Conexant chipset, the XI-735 is a superb choice for any wireless application requiring enhanced connectivity and performance in the USB form.



XI-735 at a glance

- IEEE 802.11b compliant
- 15 dBm Tx output Power
- -89 dBm @ 1 Mbps Rx Sensitivity
- Integrated Antenna
- USB 2.0 interface
- FCC and ROHS compliant
- Chipset – Prism III
- Driver support – Windows, Linux

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Physical Specification:

Form Factor	USB 2.0
Dimensions (L x W x H)	82.8mm(L) * 13.3mm(W) * 26.4mm (H)
Weight	≤ 20g

RF Specification:

Frequency Range (GHz)	North America: 2.412 ~ 2.462
	Japan TELEC: 2.412 ~ 2.484 802.11b
	Japan TELEC: 2.412 ~ 2.472 802.11b
	Europe ETSI: 2.412 ~ 2.472
	Spain: 2.457 ~ 2.462
Frequency Drift	<25KHz
Transmitter Output Power 802.11b	15 dBm ± 2dBm @1,2,5.5 and 11Mbps
Antenna Impedance	50 ohms
Media Access Protocol	CSMA/CA w/ACK
802.11b Data rates	11, 5.5, 2, 1 Mbps
Modulation	11 / 5.5 Mbps (CCK) 2 / 1 Mbps DQPSK / DBPSK
Receiver Sensitivity @ PER < 10% for 802.11b @ PER < 8% for 802.11b	54 / 48 Mbps: -65dBm / -66dBm
	36 / 24 Mbps: -70dBm / -72dBm
	18 / 12 Mbps: -77dBm / -79dBm
	9 / 6 Mbps: -81dBm / -82dBm
	11 / 5.5Mbps: -80dBm / -83dBm
	2 / 1 Mbps: -84dBm / -87dBm

Electrical Specification:

Supply Voltage	5 Vdc, +/- 5%
Sleep-to-receive startup time	<75 ms
Power consumption	TX: <330mA, RX: <310mA,

Antenna Specification

Antenna Type	Two Ceramic Antenna's
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Environmental

Working Temperature	0 ~ 55°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)

Security

The XI-735 supports 64-bit and 128-bit WEP encryption. 64-bit WEP requires a 40-bit key plus a 24-bit initialization vector. 128-bit WEP utilizes a 104-bit key plus a 24-bit initialization vector. WPA /WPA2 security features are identical to the latest conexant version as determined by the driver.

Warranty

The XI-735 is supplied with a 12 month warrantee against manufacturing defects.