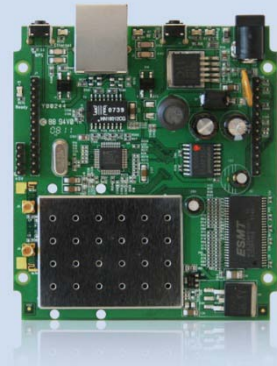


WILIGEAR 500mW Integrated Radio CPU board WBD-500



The WRB-500 is a powerful, 500mW (27dBm) integrated radio platform offering seamless wireless performance on the 2.4 GHz spectrum. The embedded chipset-radio design enables robust performance at an affordable price point by eliminating the need for additional mini-PCI radio hardware. With its small form factor, the WBD-500 can integrate into a variety of enclosures, both indoor and outdoor, and can be used in a variety of wireless applications, including 802.11b/g customer premise equipment, access points, as well as point-to-point and point-to-multipoint wireless bridges. The WBD-500 contains 8 MB flash memory and 32 MB RAM on-board, which can support a variety of robust software applications, including the pre-loaded WILI-S software suite, a carrier-class software platform with robust security and management features. The WBD-500 can be pre-configured with either the CPE or AP version of the WILI-S graphical user interface, and is also firmware factory-compatible – an online tool for developing customized firmware and graphical user interfaces (SKINS).

In addition, the WBD-500 is designed to work in an outdoor environment with on-board Ethernet surge protection, polarity-independent POE, as well as on-board overvoltage and overheating protection. The WBD-500 features wide input voltage range (from 9V to 52V), allowing for easy integration and compatibility with a variety of power supplies. The on-board radio is an Atheros chipset design (AR2315) which boasts advanced features such as 5/10/20 MHz channel capabilities as well as quarter-wave lightning protection. Having a screaming 500mW output power and excellent receive sensitivity, the WBD-500 allows achieving long-range wireless links with unparalleled performance.

Specifications

Operational

WLAN Standard	IEEE 802.11b/g
Radio Scheme	802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
	802.11b: DSSS (CCK, DQPSK, DBPSK)
Frequency Range	2.3 GHz ~ 2.5 GHz (Country dependent)
Receive Sensitivity	802.11g: -75 +/- 2dBm @54Mbps
	802.11b: -90 +/- 2dBm @11Mbps
Data Rate	802.11g: 54/48/36/24/12/9/6 Mbps
	802.11b: 11/5.5/2/1 Mbps
RF Output Power	802.11b: 27dBm @11 Mbps @11Mbps
	802.11g: 27dBm (6-24 Mbps) 26 dBm (36Mbps), 24 dBm (48 Mbps) 23 dBm (54 Mbps)
Operating Mode	Access Point AP Client (Ethernet-WLAN Bridge) WDS (Wireless Repeater, PtP, PtMP Bridge) Wireless Router AP Client with Routing Function (WISP Mode)

Electrical

Input Voltage	9 V – 52 V
Power Consumption	4 W max

Mechanical

Dimensions	98mm x 82mm x 18 mm
Weight	47 g
Chipset	Atheros, AR2315
Processor Speed	183 MHz
Antenna Connector	1 x MMCX
I/O	1 x 10/100 TX
Memory	32 MB SDRAM
Flash	8 MB
Other Features	Push Button Reset LED Indicators

Environmental

Operating Parameters

Temperature	-25°C to +65°C
Humidity	20% to 90% (non condensing)

Storage Parameters

Temperature	-40°C to +85°C
Humidity	5% to 95% (non condensing)