

Troy Etherwind Device Description

The Etherwind is an IEEE 802.11b (wireless Ethernet) compliant print-server that allows users of laptops, PDA's, cell-phones, and other similar devices to print wirelessly using spread spectrum technology.

The device utilizes 11 channels (US operation) in a DSSS modulation scheme in the 2.4GHz frequency band. These 11 channels cover 2412MHz to 2462MHz. The antenna is implemented via printed circuit etch. It transmits a maximum power of 1000mw compliant with FCC limitations. It has a useful range of approximately 300ft.

The Etherwind is powered by common 5 Volt DC wall adapter transformers typically supplying 600mA. The Etherwind is a stand-alone device, that connects to the printer via a standard IEEE P1284 parallel connection. It can also connect to other serial devices via a DB9 standard RS-232 interface.

The major components of the Etherwind are an Intersil 'Prism' 802.11b chip set and the associated SRAM, Flash, filter ICs and oscillators, a Motorola MC68LC302 microcontroller with its, clock oscillator, SRAM, and field upgradable FLASH memory, a high speed parallel and serial port host interface chip, and a printed circuit antenna. The Intersil chip set provides the RF radio communications functions; the MC68LC302 and associated hardware provides the printer control and server functions.

