

3600-2400 Series

Theory of Operation Principle

The 3600-2400 Series Hotport Mesh Node is comprised of three printed circuit assemblies; a Mother Board, a Daughter Board, and Radio Card. The Motherboard uses the Intel IXP425 as the central processing unit. Memory configuration is 32M bytes of FLASH and 64M bytes SDRAM. The Daughter Board is powered by via a AC/DC wall adapter (16V out, 2.5 A rating). The Daughter Board's main function is to generate the system level voltages used by the Mother Board and Radio Card. The Hotport Node supports up to 2 10/100 Base-TX LAN network interfaces using Admtek 6996L Ethernet switch. The interface to the LAN network is through an LTW weatherized connector. The radio card (Type III mini PCI module) plugs into the Motherboard. Communication to/from the Motherboard is made via a 128 pin mini PCI connector. The Radio Card runs from 3.3 volts, which is provided by the Motherboard. The 3600-2400 series uses an Ubiquiti Networks SR2 radio card. The SR2 card is a full featured 802.11b/g client card. The Radio operates from 2412 MHz to 2462 MHz according to the IEEE 802.11b/g specification. The data rates supported are 1 Mbit (DBPSK), 2 Mbit (DQPSK), 5.5 Mbit (CCK), and 11 Mbit (CCK) for .11b and 6, 9, 12, 18, 24, 36, and 54 MBit OFDM for .11g. The Hotport Node uses 8 dBi omni directional diversity antennas.