Firetide Model Hot Point 4100
Theory of Operation

The 4100 Series HotPoint is comprised of two printed circuit assemblies; a Support Board and a Radio. The boards are connected together via a 2 x 10 pin connector and are mounted inside a cast aluminum enclosure.

The HotPoint is powered by POE using an external AC/DC wall adapter (48V out, 0.35 A rating). The Support Board accepts the 48 VDC input through a RJ-45 connector. The Support Board converts the the 48 VDC into the supply voltages used by the the Radio Card (3.3 and 5.0 VDC) and internal circuitry (8.0 VDC). The support board also contains three LED's that indicate in the unit is powered and two SW controlled LED's that are used to display unit status and relative RSSI.
The Radio Card runs from 3.3 and 5.0 volts, which is provided by the Support Board. The output TX stage of the radio is powered from +5.0 VDC and has a supply current of 350 mA. The 4100 series uses a Firetide proprietary radio card design, which incorporates an Atheros Communications chipset. The Radio operates from 2412 MHz to 2462 MHz, 4.9 GHz and 5.725-5.850 GHz, according to the IEEE 802.11a/b/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 .11a/g. The HotPoint uses external 5/8 dBi Omni directional antenna in 2.4 GHz band and 5 Omni directional antenna in 4.9-5.8 GHz band.

Only proprietary software written and distributed by Firetide Inc. can be installed on the HotPoint . "Source code" is controlled solely by Firetide Inc and is not distributed to end users.