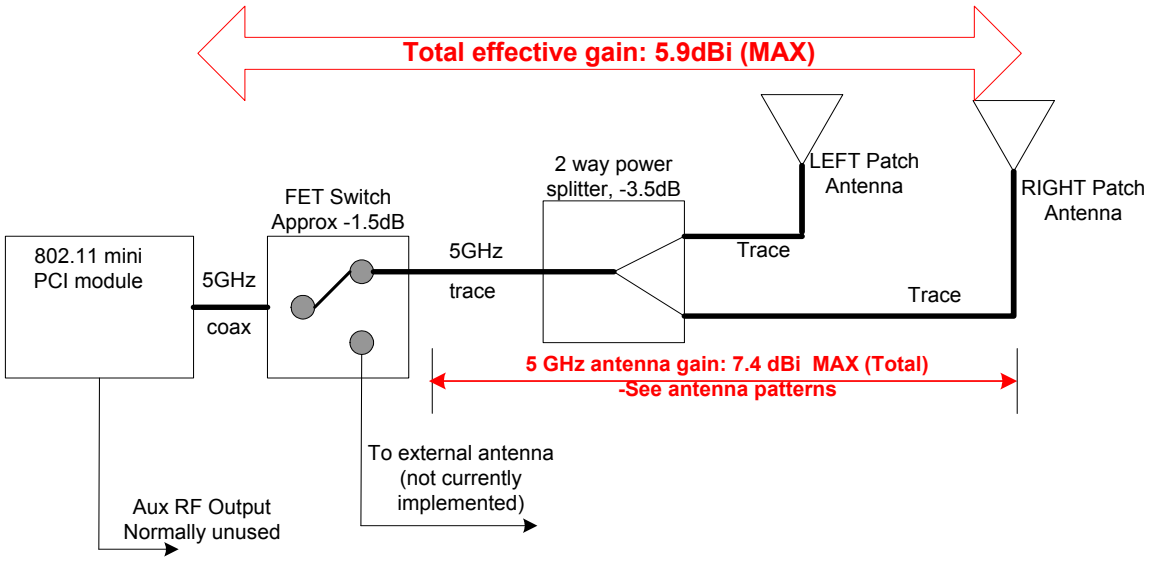
Detailed Product Information / Operational Description

The Airespace radio is an IEEE 802.11 A Virtual Access point (VAP) intended to be professionally installed and configured in corporate and industrial environments.

The access point utilizes integral antennas on the 802.11 A bands. The access point includes two integral 5 GHz patch antennas pointing 180^{o} from each other to create a somewhat omni directional 5GHz pattern. The VAP includes only a single 2.4GHz patch antenna (the 2.4 GHz antenna is discussed in the 15.247 report). The effective gain of the 5 GHz antenna path (the antenna switch and the antenna itself) is 5.9dBi. The diagrams below outline the RF path from the output of the mini PCI module within the access point to the integral antennas within the access point .See the antenna patterns included with this application (Note that only the Subpart E, 15.401 UNII 5 GHz portion is covered by this particular report)

There is a provision for attaching external 5 GHz antennas to the access point (which, when implemented will disable the integral antenna by means of the switch) however at this time, since external 5GHz antennas are not included in this certification application, the ability to utilize an external antenna on this band, and even switch the antenna selection switch to the other position will be disabled in the configuration software. The hardware was put in place to support the future use of external 5 GHz antennas once such use is authorized by the commission either by permissive change of new grant.

The access point is powered either by a external 48V power supply or via power over Ethernet.



RF Path Schematics