

High Performance 802.11n Solutions

Abicom International's "Freedom MiMo-HP" range is designed specifically for direct, dual-band (2.4/5.xGHz) integration into wireless routers and outdoor wireless networking products, such as Abicom's Freedom FWA OEM router board.

The Freedom MiMo-HP is based upon Atheros' latest 802.11n wireless chipsets and comes in two offerings, the MiMo-HP3 which offers high output power (up to 28dBm, 3x3 MiMo configuration) and the MiMo-HP2 which offers 23dBm, 2x2 configuration. Both devices are capable of delivering over 200 Mbit/sec of usable data throughput.

The "Freedom MiMo-HP" enables the creation of cost effective, wireless networking devices that can be easily integrated into customer's own equipment or built into antenna housing.

The Freedom range is particularly suited to Fixed Wireless Access (FWA) applications, including wireless bridges, wireless Internet backbone, hotspot and last mile access.

Industrial Wireless Solutions

Freedom MiMo-HP3 is an industrial grade product, specifically designed to offer the Highest Performance, reliability and durability in the harshest temperature ranges.

A unique RX Filter design and RF power control accuracy dramatically reduces Wi-Fi interference and helps improve data throughput in concurrent applications and high-density outdoor environments.

The Freedom MiMo-HP3 is RF ESD/Surge protected to 10KV and ensures the highest levels of performance and reliability even in the harshest of environments.

Cost effective Wi-Fi

The Freedom MiMo-HP2 offers a cost effective balance between the requirements of harsh industrial applications and the need to keep component costs down.

The MiMo-HP2 is based upon the Atheros AR9220 chipset and offers improved performance over the MB92 reference design.

Open Source support

Abicom provides a full wireless point to point and point to multipoint solution, with advanced features such as multicast mitigation and spectral scanning. These are available when the MiMo-HP is combined with our Freedom Nx2 and Freedom FWA platform boards.

Both cards are also supported under the Ath9K open source project and can be used in applications such as OpenWRT.

Abicom can also provide a full Atheros based source code sublicense, which provides access to higher performance drivers and features, and can assist in their customization and development.

About Abicom: Abicom International provides wireless engineering services and product development in all aspects of wireless data communications.

Abicom has extensive experience in WLAN, WISP (Wireless ISP) and is an Atheros Authorised Design Center.

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Freedom MiMo-HP2



Freedom MiMo-HP3

Key Specifications

Frequency Range:	2300 – 2500 MHz b/g/n 4900 – 6000 MHz a/n
Transmit Power:	
MiMo-HP2	Up to 23dBm n/g/b mode Up to 21dBm n/a mode
MiMo-HP3	Up to 28dBm n/g/b mode Up to 25dBm n/a mode
RF Connector	
MiMo-HP2	2x U.FL Ultra Miniature coaxial
MiMo-HP3	3x MMCX
Max Transmit data-rate:	300 Mbit/sec
Practical data-rate :	100+ Mbit/Sec in HT20 Mode 210+ Mbit/Sec in HT40 Mode
Operating Modes:	AP, WDS Repeater, Point to Multipoint FWA, Station/Client
Security:	64, 128 & 152 bit WEP AES-CCM, TKIP, WPA/WPA2 and 802.1x.
Power Consumption:	
MiMo-HP2 (3.3V)	2.0W - 3.5W Max
MiMo-HP3 (3.3V/5.0V)	5.0W - 6.4W Max
Temperature range:	
MiMo-HP2	-20°C ~ +60°C
MiMo-HP3	-40°C ~ +75°C
Dimensions:	
MiMo-HP2	Mini PCI- Type IIIA (59.6x50.8)
MiMo-HP3	Mini PCI- Type IIIA+ (59.6x65.8)

Approvals:

FCC Part 15.401, Part 15.407, Part 15.247, FCC Part 15.247, 47 CFR, FCC Class-B, FCC Part 15.107 & Part 15.109;
IC RSS210, RSS139-1, ICES-003, limited module level approval.
ETSI, EN301893, EN60950, EN 301.893, EN 300.328, EN 301489- 1/17, EN 55022, EN 55024