

## MaxR-7102-AP

Dual Band 802.11 a/b/g/n AP,  
With Fast Ethernet and  
300MHz of processing speed.

Powered by Arada Wireless Solution



Arada Wireless Solution (AWS) combines with industry-leading hardware to give you a unique 802.11n dual-band Wireless Access Point (AP). The product has been specifically designed for the high-end Enterprise and Small and Medium Business (SMB) segment. With enterprise class advanced features, this dual band AP offers best-in-class performance using state of art Atheros 2x2 radio chipsets. The single miniPCI based design runs on the Atheros' AR7130 processor at 300MHz CPU clock.

The dual band MaxR-7102-AP Access Point is a powerful platform for high-performance, 802.11n ready, WLAN applications for various verticals including Enterprise and SMB. It offers ultimate network performance in the 2.4GHz and 5 GHz band using 2x2 MIMO radios, together with advanced 802.11n features.

### Platform Highlights

- High performance, draft 2.0 compliant wireless access point solution.
- 300MHz processing power with 2x2 MIMO radio for highest throughput
- Industry's highest TCP/IP throughput at extended range.
- Support for 2x2 MIMO with spatial multiplexing.
- Operating frequency from 2.400 - 2.500 GHz and 5.150 GHz – 5.825 GHz
- Compliant with IEEE 802.11a, 802.11b, 802.11g, 802.11d, 802.11e, 802.11h, 802.11i, 802.11n.
- Lead-free RoHS compliant.
- PoE support
- Support for internal and External Antenna
- Support for 128 Clients
- Support for turning OFF all the LEDs
- Remote configuration

<b>Software Features</b>	
<b>AP Modes</b>	<ul style="list-style-type: none"> <li>Access Point mode</li> <li>Point-to-point support</li> <li>Point-to-multipoint</li> <li>WDS client</li> <li>Repeater</li> <li>WDS links with WPA-PSK</li> <li>WDS links with WPA2-PSK</li> </ul>
<b>Wireless Security</b>	<ul style="list-style-type: none"> <li>Upto 16 BSSIDs supported</li> <li>Hidden SSID</li> <li>RADIUS MAC authentication</li> <li>Local MAC authentication</li> <li>802.1x client authentication</li> <li>WEP encryption (64, 128, 152 bit)</li> <li>Dynamic WEP keys with 802.1x</li> <li>WPA and WPA2 over 802.1x</li> <li>WPA and WPA2 Pre-shared Key</li> <li>WPA-WPA2 Mixed Mode</li> <li>WPA2 Pre-authentication</li> <li>TKIP and AES encryptions</li> </ul>
<b>Hotspot support</b>	
<b>VLAN</b>	<ul style="list-style-type: none"> <li>802.1Q tagging</li> <li>VLAN bridging</li> <li>4095 VLAN IDs</li> <li>Management VLAN ID</li> <li>Default VLAN ID per radio</li> <li>Untagged VLAN</li> <li>802.1x dynamic VLAN assignments</li> </ul>
<b>QoS</b>	IEEE 802.1p/1Q
<b>Radio Settings</b>	<ul style="list-style-type: none"> <li>Country Code setting</li> <li>External antenna</li> <li>Auto channel selection</li> <li>Selectable mode operation</li> <li>Selectable power setting</li> <li>Data rate setting</li> <li>Selectable beacon interval</li> <li>Selectable DTIM interval</li> <li>Adjustable RTS threshold</li> <li>Adjustable fragmentation threshold</li> <li>Maximum clients setting (128)</li> <li>Frame Aggregation</li> </ul>
<b>Bridging</b>	802.11D and Spanning Tree Protocol
<b>System Software Upgrade</b>	<ul style="list-style-type: none"> <li>TFTP upgrade</li> <li>FTP upgrade</li> <li>HTTP upgrade</li> </ul>
<b>IP Address Management</b>	<ul style="list-style-type: none"> <li>Static</li> <li>DHCP client</li> </ul>

	DHCP server DNS resolution
<b>SNMP</b>	SNMP v1 and v2c SNMPv3 users SNMPv3 groups SNMPv3 trap targets SNMPv3 trap filters SNMP agent
<b>MIB support</b>	802.11a/b/g MIB 802.11n MIB Enterprise MIB
<b>Management Access</b>	Console CLI HTTP Packet capture HTTPS Telnet SSH v2.0
<b>Logging</b>	Event Logging Remote Syslog (4 servers) Console display and clear Web display and clear
<b>System Clock</b>	Manual date and time setting Time zone Daylight saving NTP support
<b>System Information</b>	System configuration Wireless configuration Wireless client status
<b>Full Linux SDK support</b>	
<b>Hardware Support</b>	
<b>Processor Board (AR7130)</b>	32-bit 24k MIPS processor core running at 300MHz
<b>Ethernet</b>	Support for dual 10/100 Fast Ethernet MACs
<b>Radio 1 (AR9220)</b>	Dual Band 2x2(2 streams) 11n MIMO radio
<b>Frequency Band</b>	2.400 - 2.500 GHz and 5.150 - 5.825 GHz
<b>Modulation Technology</b>	OFDM with BPSK, QPSK, 16 QAM, 64 QAM; DBPSK, DQPSK, CCK
<b>FEC Coding Rate</b>	1/2, 2/3, 3/4, 5/6
<b>Hardware Encryption</b>	AES, TKIP, WEP
<b>Interfaces</b>	PCI - Communication Interface GPIOs, LEDs - Peripheral Interface EEPROM - Memory Interface I <sup>2</sup> S for Audio Streaming SLIC for VOIP Dual USB for NAS, networking printer connectivity, etc.
<b>PCI</b>	32-bit, 33/66 MHz PCI 2.3 host interface
<b>Memory</b>	DDR and serial FLASH memory interfaces

<b>Debug</b>	High speed UART and GPIOs
<b>Supported Data Rates</b>	IEEE 802.11b : 1 – 11 Mbps IEEE 802.11g : 6 – 54 Mbps IEEE 802.11a : 6 – 54 Mbps XSPAN : 6.5 – 300 Mbps (per band)
<b>Variable Channel support</b>	Support for 20 and 40 MHz channels.