MOTOROLA

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IAP6300
Intelligent Access Point • for 2.4GHz MEA

The IAP6300 is the wireless gateway between a 2.4GHz MEA mobile broadband network and the greater wired world.

The Intelligent Access Point (IAP) is a small, low-cost device that acts as the bridge from the wireless network to the wired world. Each IAP offers a maximum burst data rate of 6 Mbps for voice, video and data communications. If greater network capacity is required, additional IAPs can be easily deployed – without the need for extensive RF or site planning. The location of IAPs is not critical due to the self-forming, self-healing & self-balancing nature of the 2.4GHz MEA network.

Motorola's mesh networking technology enables users to wirelessly access critical broadband applications seamlessly – virtually any time and anywhere. Whether utilizing predeployed infrastructure, or an instant, ad hoc, broadband network formed with other users, Motorola's mesh networking technology delivers real-time data to detect, prevent, respond.

Easy to Install and Deploy
IAPs are designed to mount on utility poles, billboards, buildings, etc. Simple mounting hardware and plug-in power and network connections make deployment easy. IAPs power up and integrate into the network automatically.

Up to 6 Mbps Burst Data Per IAP
Each IAP provides up to 6 Mbps burst data. Since IAPs utilize intelligent data rate selection and sophisticated self-forming routing algorithms, new IAPs can be added to address hot spots, or any place increased capacity is needed. Deployment is simple, as new IAPs automatically integrate themselves into the network.

Supports High-Speed Mobility
The MEA solution has been designed from the ground up as a mobile broadband network. Wide area mobility management and seamless hand-offs between IAPs help ensure consistent service and sustained broadband data rates, even with clients moving at highway speeds.

Network Management and Monitoring
The IAP6300 supports over-the-air management and maintenance of Wireless Routers and Client Devices. IAPs monitor the network's health via communications with the MiSC. Over-the-air software loads for network and client devices can be distributed via IAPs.

Fast and Accurate Position Location
Depending on network configuration, every MEA radio can provide quick and accurate position location information that does not require the use of GPS satellites. Location information is provided in standard NMEA0183 format, or through the MEA API. This location information can assist in the deployment of resources, creating a visual map of asset positions at an incident or across an entire city.

Supports End-to-End Industry Standard IP
Intelligent Access Points transparently support end-to-end, standards-based Internet Protocol (IP) applications and devices. This maximizes existing investments in client hardware and software, while eliminating training for new applications or procedures.

IAP6300 RADIO CHARACTERISTICS

Output Power	Up to 25 dBm
RF Modulation	QDMA
Operating Frequency (GHz)	2.4 - 2.4835 (2nd ISM Band)
Maximum Burst Data Rate	6 Mbps
Spectrum Used	60MHz
Antenna Type	Omnidirectional, 8 dBi
Antenna Connector	N-Type

NETWORK

Network Management Software	MeshManager Element Management System via SNMP v.3
Network Interface	10/100 Mbps Ethernet (RJ-45) connector

SECURITY

Virtual Private Network (VPN)	Supports FIPS-140-2 encryption (Motorola Multi-Net Mobility)
Authentication	802.1X

POWER

Power Requirements	90 to 264 VAC, 47 - 63Hz single phase
Power Connector	AC, NEMA 5-15 power cord • 6 ft (1.83m)
Power Consumption	12W Maximum at 120 VAC

PHYSICAL

Dimensions	6.25" x 6.25" x 4" (15.9cm x 15.9cm x 10.2cm)
Weight	4.4 lbs (1.99kg)
Packaging	NEMA 4 environmental enclosure for indoor or outdoor deployment

ENVIRONMENTAL

Temperature Range	-35 to 55 °C
Humidity	0 to 100%, non-condensing
General Certifications	FCC Part 15, RSS-210
Safety Certifications	IEC 60950, EN 60950, EN 60215, CSA C22.2 No. 60950-00010
CE Mark	ETSI EN 301 489-1, ETSI EN 301 489-17

AVAILABLE OPTIONS

Power	Cable assembly, or AC photo cell power adapter
DC Input	IAP6300 with 5-14 VDC input
Antenna	Ask your sales representative for other antenna options

2.4GHz MEA Additional Network Features

- Network Time Protocol (NTP) Support
- Differentiated Services Using IP Quality of Service (QoS) Support
- Over-the-Air Software Upgrade Support
- MAC Access Control Lists
- Web (HTTP) Based Management Interface
- SNMP Agent for Remote Management
- Firmware Upgrades via Trivial File Transfer Protocol (TFTP)