APC 2M

The APC 2M is a versatile, very efficient, and stable 2.4 GHz access point. This product is equipped with an extreme output power (up to 30 dBm) 802.11n MIMO radio wrapped securely inside a robust IP-65 compliant enclosure with two N-type connectors, suited for wide coverage area applications. The robust hardware is coupled with an advanced and feature-rich operating system optimized for high performance communications which allows compatibility with older 802.11b/g standards while adding support for the latest in wireless communications. The APC 2M su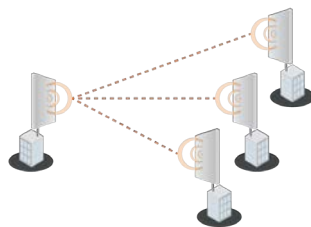pports access point, station, and WDS operating modes and can act as bridge or as router making it one of the most flexible devices on the market.

The robust software engine running on the APC 2M provides a user-friendly Adobe Flex - based GUI with instant changes, includes useful installation tools (Site survey, Antenna alignment, Delayed reboot, spectrum analyzer, ping, traceroute) and also is compatible with Wireless Network Management System for one of the most advanced management tools on the market.

Usage examples

PTMP

Deliberant APC 2M is an ideal device for point-to-multiple point applications as a base-station with and external sector or omni-directional antenna.

PTP

APC 2M is a great device for medium long range point-to-point applications with an external high-gain dual polarized antenna (panel or dish).

Product/ distance recomendation	PTMP mode	PTP mode	PTP mode (full capacity)
APC 2M	Antenna dependent	Antenna dependent	Antenna dependent

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FUNCTION

APC 2M

Wireless

WLAN standard	IEEE 802.11 b/g/n, iPoll proprietary
Radio mode	MIMO 2x2
Operating modes	Access point (auto WDS), Station, Station WDS, iPoll Access Point, iPoll Station
Radio frequency band	2.4 GHz
Transmit power	Up to 30 dBm (country dependent)
Receive sensitivity	Varying between -94 and -74 dBm depending on modulation
Channel size	20, 40 MHz
Modulation schemes	802.11 g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
	802.11 b: DSS (CCK, DQPSK, DBPSK)
Data rates	802.11 n: 300, 270, 240, 180, 120, 90, 60, 30 Mbps
	802.11 g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11 b: 11, 5.5, 2, 1 Mbps
Error correction	FEC, Selective ARQ
Duplexing scheme	Time division duplex

Receive sensitivity (dBm)	802.11 N/ iPoll	15 Mbps	30 Mbps	45 Mbps	60 Mbps	90 Mbps	120 Mbps	135 Mbps	150 Mbps
		-94	-92	-89	-86	-83	-78	-76	-74
		30 Mbps	60 Mbps	90 Mbps	120 Mbps	180 Mbps	240 Mbps	270 Mbps	300 Mbps
		-94	-92	-89	-86	-83	-78	-76	-74
	802.11g	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
		-94	-93	-92	-90	-87	-84	-79	-77

Output power (dBm)	802.11 N/ iPoll	15 Mbps	30 Mbps	45 Mbps	60 Mbps	90 Mbps	120 Mbps	135 Mbps	150 Mbps
		29	28	28	28	27	26	25	24
		30 Mbps	60 Mbps	90 Mbps	120 Mbps	180 Mbps	240 Mbps	270 Mbps	300 Mbps
		29	28	28	28	27	26	25	24
	802.11g	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
		30	29	29	29	29	29	28	27

Antenna

Type	N-connectors for external antenna
Gain	Antenna dependent

Wired

Interface	10/100 Base-T, RJ45

Networking

Operating modes	Bridge, Router
WAN	Static IP, DHCP client, PPPoE client
NAT	Routing w/ or w/o NAT
Static routing	Supported
DHCP	Client, Server, Relay
Port forwarding	Supported
VLAN	Supported for management and data

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FUNCTION

APC 2M

Softwave

General	Ability to define/limit frequency, channel width, EIRP, modulation
Advanced wireless functionality	ATPC (automatic transmit power control), auto-channel, auto-modulation,
Operating mode	Router, Bridge
Wireless operating modes	AP auto WDS, Station, Station WDS, Virtual radios (VSSID), iPoll access point, iPoll client
Wireless security	WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User isolation, UAM (web portal authentication)
Wireless QoS	WMM
WAN protocols	Static IP, DHCP client, PPPoE client
Network	NAT, static routing, firewall, port forwarding, VLAN, traffic shaping
Services	DHCP server, SNMP server, NTP client, Alerts, Remote syslog, Wireless and Ethernet statistics, bandwidth limiting
Management	HTTP(S) GUI, SSH CLI, SNMP read, WNMS, troubleshooting file, reset via reset tool
Tools	Site survey, Link test, Antenna alignment, Ping, Traceroute, Spectrum analyzer, delayed reboot

Physical

Dimensions	Length 150 mm (5.9 ''), width 115 mm (4.5 ''), height 55 mm (2.1 '')
Weight	400 g (16.2 oz)
Power supply	12 - 48 V DC passive PoE
Power source	100 – 240 VAC via included adapter
Power consumption	7 W

Environmental

Operating temperature	-40°C (-22 F) ~ +65°C (+149 F)
Humidity	0 ~ 90 % (non-condensing)

Management

System configuration	User-friendly web GUI, Command line via SSH, centralized Wireless Network Management System, reset via reset tool
System monitoring	SNMP v1/2c/3 server, Syslogs, system alerts via e-mail and SNMP trap

Regulatory

Certification	FCC/CE/Safety/ RoHS compliance

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