

# P-520

## 54Mb Operator Access Point

Carrier-Grade Wi-Fi Access Point with integrated diversity antennas



The **P-520 Operator Access Point** is the ideal product to extend the coverage of your wireless access service. It supports operator class network security.

### High performance for maximum coverage

The Gemtek Systems **P-520** Operator Access Point provides quality connectivity for Wi-Fi networks. Designed to support even the largest of Hotspots, this AP combines high receiver sensitivity, high output power, and proven antenna technology to maximize coverage.

### The perfect AP for large areas

The **P-520** is specifically designed for large venues. Connected to an Access Controller, or Hotspot-in-a-Box like the Gemtek Systems **G-4100** or **P-560**, **P-520s** can easily cover a hotspot of any size. Together they simplify network management and maintenance. The AP is IEEE 802.3af compliant, enabling it to be powered over standard Ethernet cabling, reducing installation and maintenance costs.

### Security

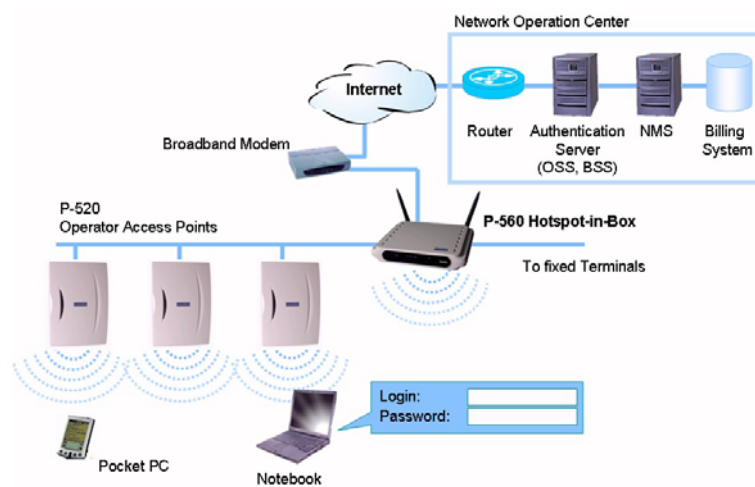
**P-520** supports various state-of-the-art security mechanisms like WPA, Access Control Lists, 802.1x/EAP authentication and Layer 2 User Isolation. The User Isolation feature can effectively prevent peer-to-peer communication between client stations. The AP is designed for wall mount with integrated theft-protection.

### Total Management

The **P-520** Operator Access Point simplifies the set-up, operation, control and management of public access networks. The AP can be remotely managed via HTTP, SNMP, or Telnet. Auto-channel selection and integrated site survey utilities help administrators to optimize cell planning.

### P-520 Highlights

- IEEE 802.11g/b Access Point, Wi-Fi compliant
- Integrated high-gain diversity antennas
- Adjustable Output Power
- Power-over-Ethernet support
- Theft protection system
- 802.1x/EAPoLAN with optional pass-through methods
- WPA support
- Layer-2 user isolation
- Seamless roaming (IAPP support)
- Remote management, remote updates



## About Gemtek Systems

Gemtek Systems is a global Wi-Fi Public Access systems and solutions provider.

### P-520 Specification

<b>FEATURES</b>				
• IEEE 802.11g/b Access Point, Wi-Fi compliant		• 802.1x authenticator supports EAP-SIM, MD-5, TLS, TTLS, PEAP		
• WPA (Wi-Fi Protected Access), RADIUS, PSK		• Access Control List (MAC)		
• Multiple SSIDs with VLAN support (in preparation)		• IAPP roaming		
• WDS - Wireless Distribution System to connect client stations and up to 7 Bridge APs concurrently		• Adjustable RF output power (0-23 dBm)		
• Layer 2 User Isolation (disable peer-to-peer communication)		• Secure remote management via HTTPs, Telnet, SSH, SNMP (MIB II, 802.11 MIB, private MIB)		
• Automatic channel selection		• Integrated Site Survey, Station supervision, Loopback test		
<b>INTERFACE</b>				
Ethernet Interface	10/100 Base-T, auto-sensing, RJ-45			
Serial Console Port	DB-9 connector (internal)			
<b>WIRELESS</b>				
Standard	IEEE 802.11b, 802.11g, mixed mode b+g (2.4GHz ISM band)			
Data Rates	802.11b/DSSS 11, 5.5, 2, 1Mbps (auto fallback) 802.11g/OFDM 54, 48, 36, 24, 18, 12, 9, 6 (auto fallback)			
Channels	Up to 13 channels selectable based on regulatory domain settings			
RF Transmit Power	802.11b: 0 - 23dBm (adjustable in steps) 802.11g: 0 - 21dBm (adjustable in steps)			
Receiver Sensitivity	Data Rate	Sensitivity	Delay Spread	Modulation
	54Mbps	-71dBm	>100ns	64QAM/OFDM, 8% PER
	48Mbps	-73dBm		64QAM/OFDM, 8% PER
	36Mbps	-75dBm		16QAM/OFDM, 8% PER
	24Mbps	-78dBm		16QAM/OFDM, 8% PER
	18Mbps	-80dBm		QPSK/OFDM, 8% PER
	12Mbps	-82dBm		QPSK/OFDM, 8% PER
	11Mbps	-87dBm	>90ns	CCK, 8% PER
	9Mbps	-84dBm		BPSK/OFDM, 8% PER
	6Mbps	-86dBm	>800ns	BPSK/OFDM, 8% PER
	5.5Mbps	-89dBm	>200ns	CCK, 8% PER
2Mbps	-90dBm	>360ns	DQPSK, 8% PER	
1Mbps	-92dBm	>360ns	DBPSK, 8% PER	
Noise Figure	5.6 dB typical			
Antennas	Two integrated diversity antennas: 6dBi directional antenna vertical polarization & 4dBi horizontal polarized antenna			
<b>PHYSICAL SPECIFICATION</b>				
Dimension	196 x 142 x 35mm / 7.7 x 5.6 x 1.4in (L x W x D)			
Weight	350g			
Housing	Ruggedized and flame-resistant plastic housing, wall-mount kit with theft protection			
Environmental Conditions	Operating temperature: 0°C to 45°C Operating humidity: 10% to 95%, non-condensing			
Power Supply	Power-over-Ethernet, IEEE 802.3af compliant, optional PoE hub available, 5V connector for AC/DC converter 100/230V to 5V DC/1.5A, 4.2W max			
<b>LEDS</b>				
3 LEDS	RF activity, LAN activity, Power			
<b>MANAGEMENT</b>				
Interfaces	HTTP, Telnet, SNMP (MIB II, 802.11 MIB, private MIBs)			
Software Update	Remote Software Update via HTTP			
Reset	Reset to factory default by command and by internal reset button			
<b>WARRANTY</b>				
2 years				
<b>PACKAGE CONTENTS</b>				
P-520 54Mb Operator Access Point		CD-ROM with software and documentation		
Ethernet patch cable		100/230 Power Adapter		
<b>RELATED PRODUCTS</b>				
Access Controllers: G-6000, 4100 Public Access Controller		P-560 54Mb Hotspot-in-a-Box		
Client Adapters: T-300 series (2.4 GHz, 11Mb),				
PoE Switches: E-820 8-port Power-over-Ethernet Switch		E-110 Single-port PoE Feeder		
Software: S-1000 Network Management Suite				

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