



## Intelligent Wireless Mesh Networking System



IPMobileNet's XpressNet Wi-Fi mobile data solution uses the high-speed capabilities of 802.11 for backhaul and mobile data user access to LANs, WANs, and other IP-based networks. XpressNet's advanced mesh technology provides integrated dedicated radios and separate channels for the wireless backbone and dedicated radios and channels for mobile client connectivity, making it the highest performance mesh networking system available today.

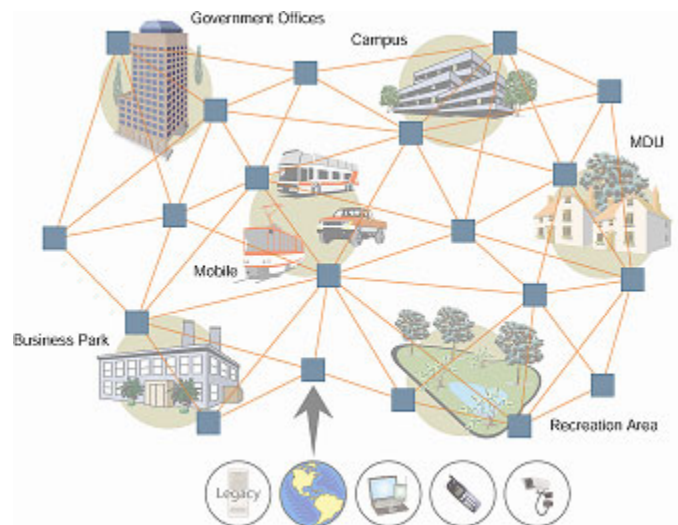
SmartCell is both a wireless access point for mobile data users and backhaul connectivity to a wired network. SmartCell supports all 802.11 standards (a,b,g) both in the mesh backbone and to client devices, making it the most flexible wireless mesh networking system available.

Using 802.11 a or g, network backhaul speeds are up to 108 Mbps between meshed access points. Mobile clients supporting 802.11 (b), (a) or (g) can achieve data rates of up to 54 Mbps. SmartCell access points can be utilized for "hot spot" uploading and downloading of files and reports, or it can be used as a high-speed supplement to private radio systems like IPMobileNet's IP Series. Mesh network topology, combined with interoperability in all 802.11 standards makes XpressNet the most flexible wireless network available today.

The latest hardware-based encryption and authentication schemes are employed to ensure that data transactions are secure. Network management tools automatically detect and isolate unauthorized users. XpressNet is a high-speed, high-security option for public safety communications.

## Features

- Multi-radio, multi-channel, multi-RF mesh network for wireless backbone
- 802.11 (a), (b) and/or (g) connectivity to client devices
- High performance mesh network with up to 108 Mbps link rates
- Mesh network topology for ease of deployment and lower total deployment costs
- Self-configuring, self-tuning, and self-healing wireless network
- Most advanced authentication and encryption standards
- Fully manageable via browser based network management utility or SNMP supported network management applications
- Modular hardware architecture for easy system expansion





# XpressNet SmartCell

## SPECIFICATIONS

Protocols	802.11(a), (b), and/or (g), and/or Super G
Data Rate	11 Mbps 802.11(b), 54 Mbps 802.11 (a) or (g), 108Mbps at Super G and Turbo mode
Frequencies	Automatic channel selection. 5.8 GHz 802.11(a), 2.4 GHz 802.11(b), (g) or Super G. User configurable for international bands.
Radios	Up to 4 802.11 radios per SmartCell, any combination of 802.11 (a), (b), or (g)
TX Power	Up to 1 Watt
Power supply	120/240 VAC, 50 / 60 Hz auto-sensing, Power-over-Ethernet (Cisco and 802.3af), DC input for solar cell array
Back up power	Li-Ion battery
Current Consumption	up to 18 Watts
Operating temperature	-35 to +55 degrees Celsius

## SECURITY

Authentication	802.1x EAP (MD5, TLS, TTLS, PEAP)
Encryption	WPA2 with AES, WEP, TKIP/MIC
VPN	Compatible, restricted to authorized users
Rogue detection	Automatic rogue access point and client detection and signal triangulation

## NETWORKING

Connectors	10/100 Base T Ethernet, 1 to 4 ports on each access point
Backhaul	User configurable wireless, 802.11 (a) (b) or (g)
Access point configuration	Automatic detection and configuration, self-initializing, self-tuning, self healing
Virtual Networking	Up to 16 BSSIDs per access point, with VLAN tagging

## MANAGEMENT

Console	Secure, browser-based GUI management interface. Supports Telnet and SSH
SNMP	MIB I or MIB II, Syslog, with user event and system event monitoring, trap generation and notification
Display	Active, real-time graphic display of network, subnets, modes, active links and users
Performance	Active, real-time monitoring of RSSI and link speed. Automatic load leveling.
Firmware updates	Over-the-air, managed

