



WiBorne, Inc.

802.11 & 3G Radio Applications with WAP-520



WAP-520 Radio Solutions

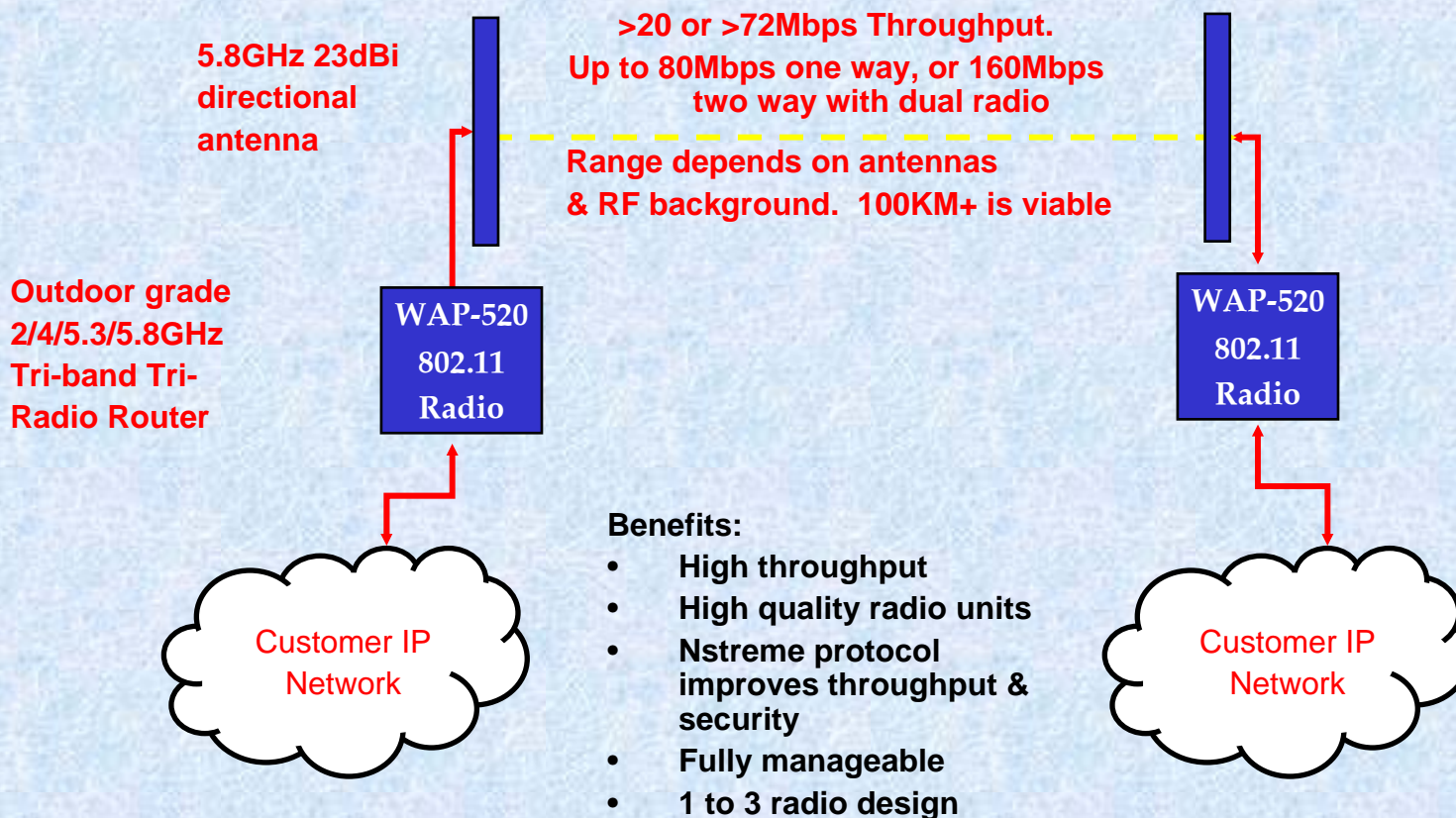
Flexible H/W and Router OS enables many applications

- Point-to-Point links
 - Point-to-Multipoint
 - 802.11n support (optional)
 - Hotspot Applications
 - Wireless CCTV
 - Wireless Broadband
 - Wifi CityWide
 - Transportation
 - Aerial CCTV video
 - Ultra High Bandwidth
 - Very Long Range
 - Optional 3G Backhaul
- Best-in-class radio & throughput
Enhanced features & Dual Radio
high bandwidth for hotzone
Many features & Dual radio
High quality & secure
Many features & support
Layer2 Mesh for backhaul
Moving vehicles e.g. Trains
Air-to-ground video links
Up to 80 / 80 Mbps up and down
100KM or more
W3G-520: 3G (HSDPA/HSUPA)



WAP-520 Wireless P2P

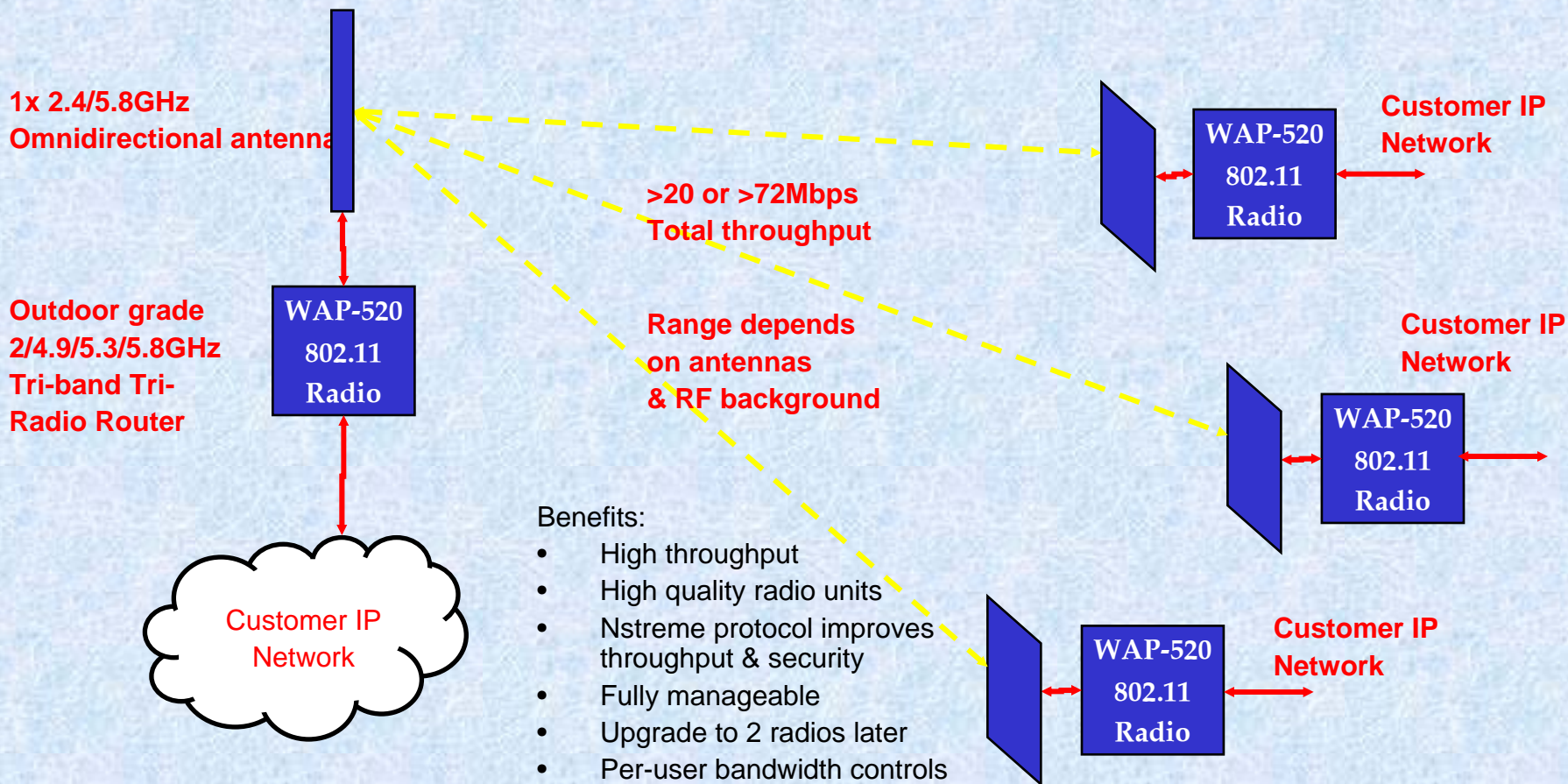
Point-to-Point links – Superior throughput & radios





WAP-520 Wireless P2MP

Point-to-Multipoint links – Single radio & b/w controls



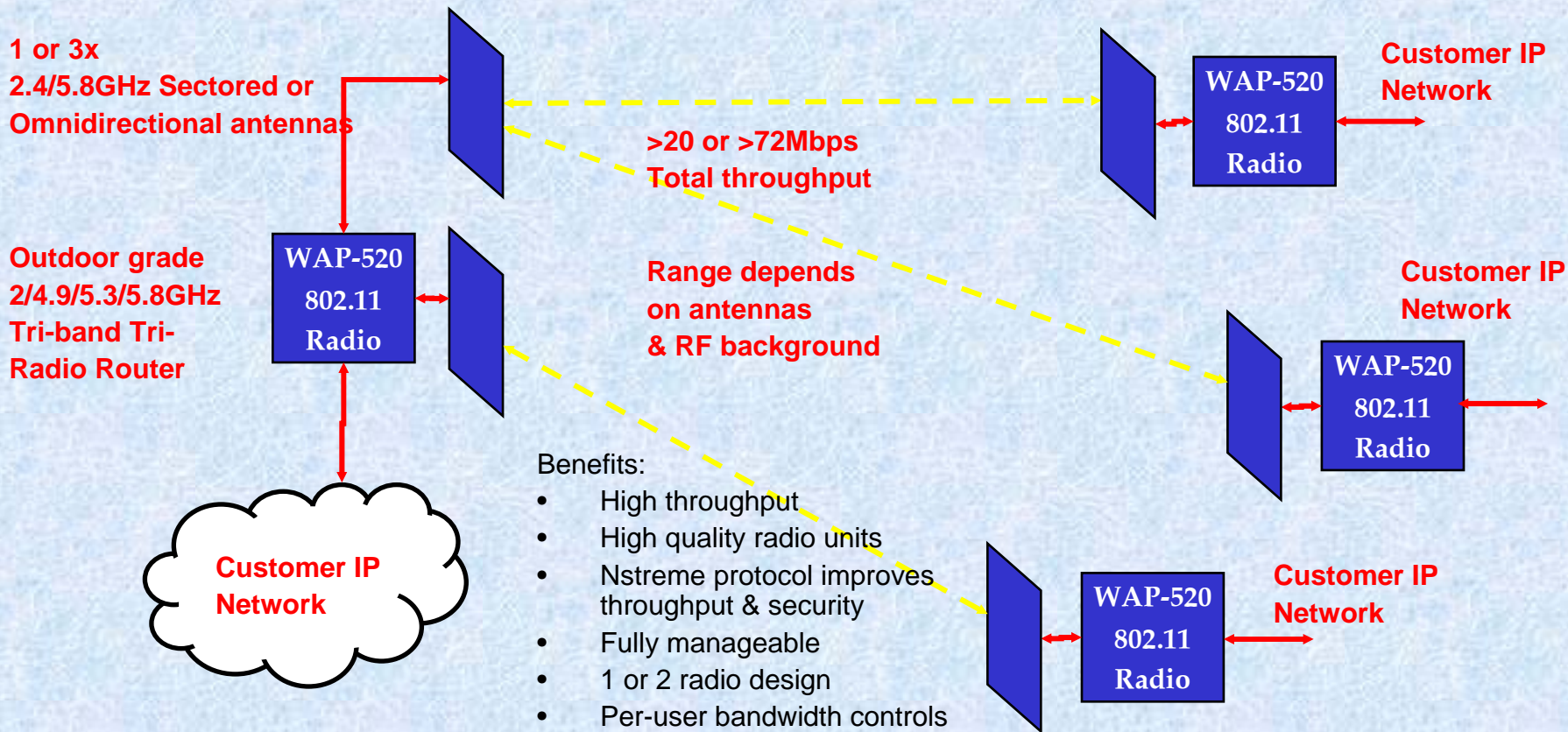
Benefits:

- High throughput
- High quality radio units
- Nstreme protocol improves throughput & security
- Fully manageable
- Upgrade to 2 radios later
- Per-user bandwidth controls



WAP-520 Wireless P2MP

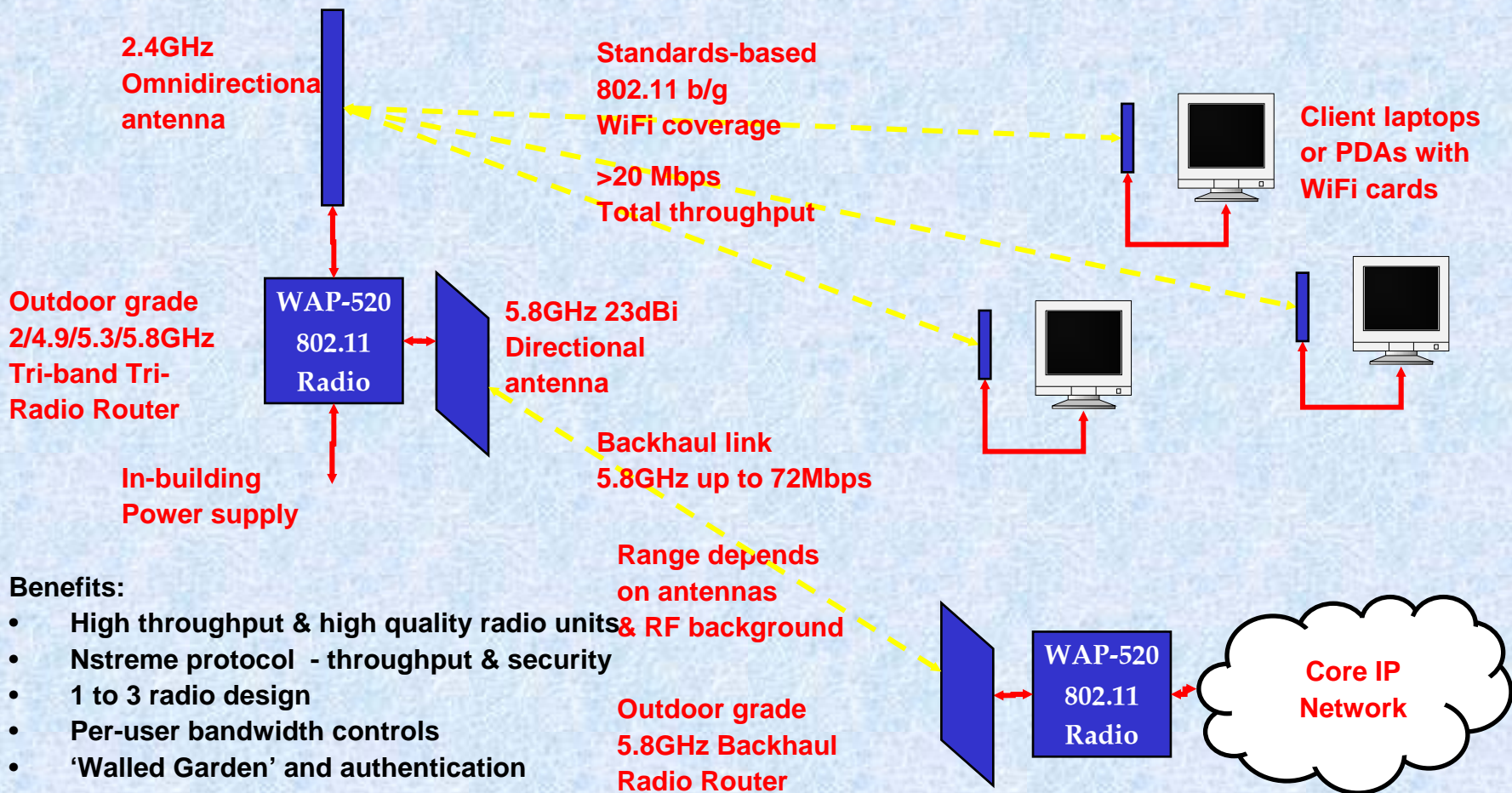
Point-to-Multipoint links – Dual radios & b/w controls





WAP-520 Wireless Hotspot

Hotspot Applications – Features, dual radios & b/w controls



Benefits:

- High throughput & high quality radio units
- Nstreme protocol - throughput & security
- 1 to 3 radio design
- Per-user bandwidth controls
- 'Walled Garden' and authentication



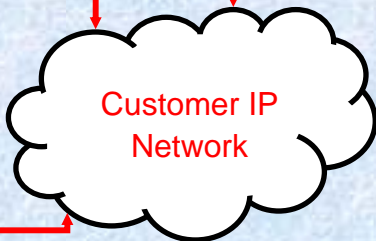
WAP-520 Wireless CCTV

Wireless CCTV – High quality pictures with b/w controls

1 to 3, or more x
2.4/5.8GHz
Sectored or
Omnidirectional
antennas

Outdoor grade
2/3/4/5GHz
Tri-band Dual-
Radio Router

Video Monitors



WAP-520
802.11
Radio



>20 or >72Mbps
Total throughput

Range depends
on antennas
& RF background

Benefits:

- High throughput
- Tri-band radio units
- Nstreme protocol improves throughput & security
- Fully manageable
- 1 or 2 radio design
- Flexible architecture

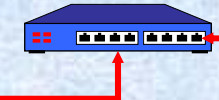
Legacy Analogue
CCTV Camera



#1

Pan & Tilt
unit

WAP-520
802.11
Radio



Video-over-IP
converter

...
Total number of cameras depends on
Bandwidth, quality & system design

Modern
Digital IP camera



#N

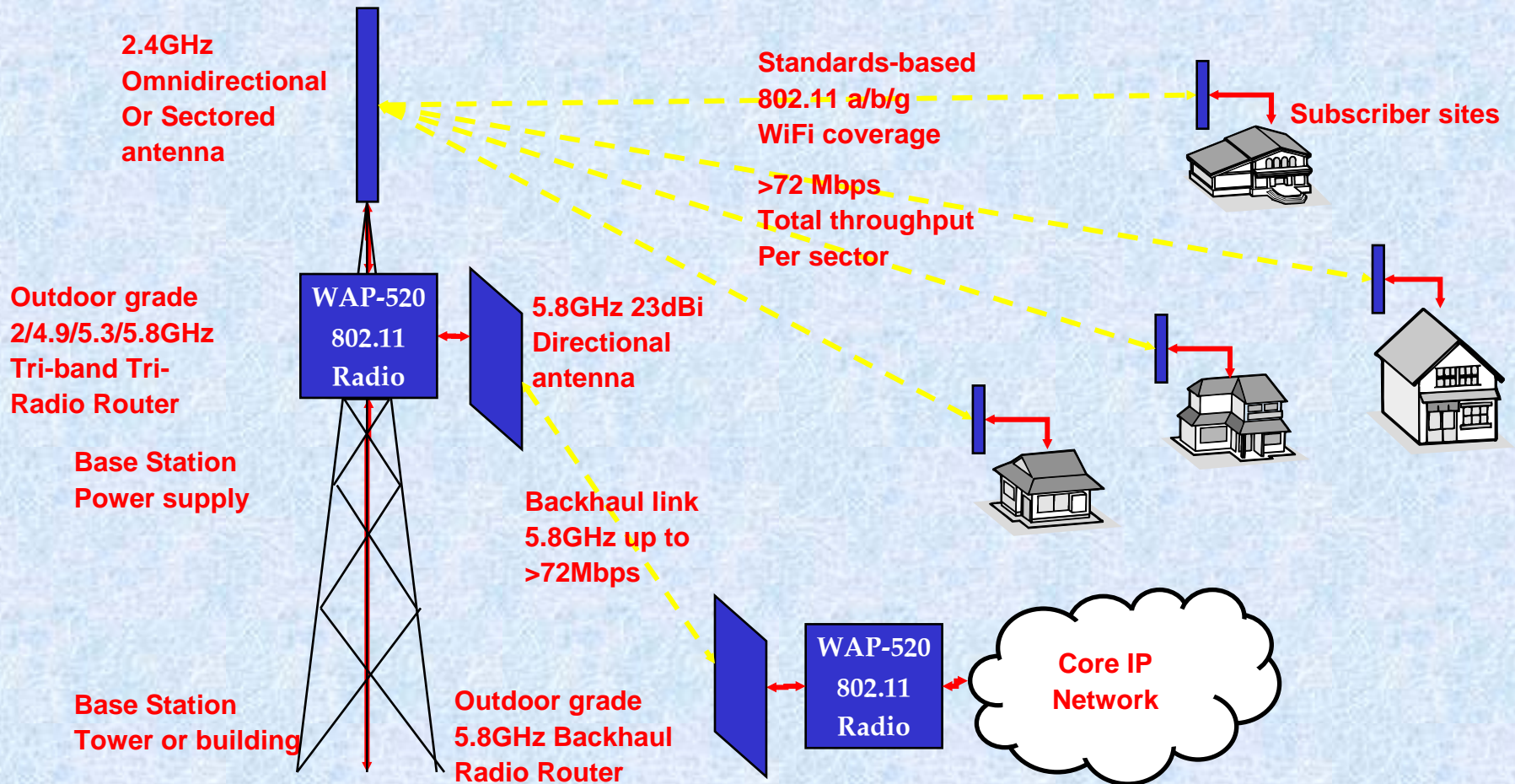
WAP-520
802.11
Radio





WAP-520 Wireless Broadband

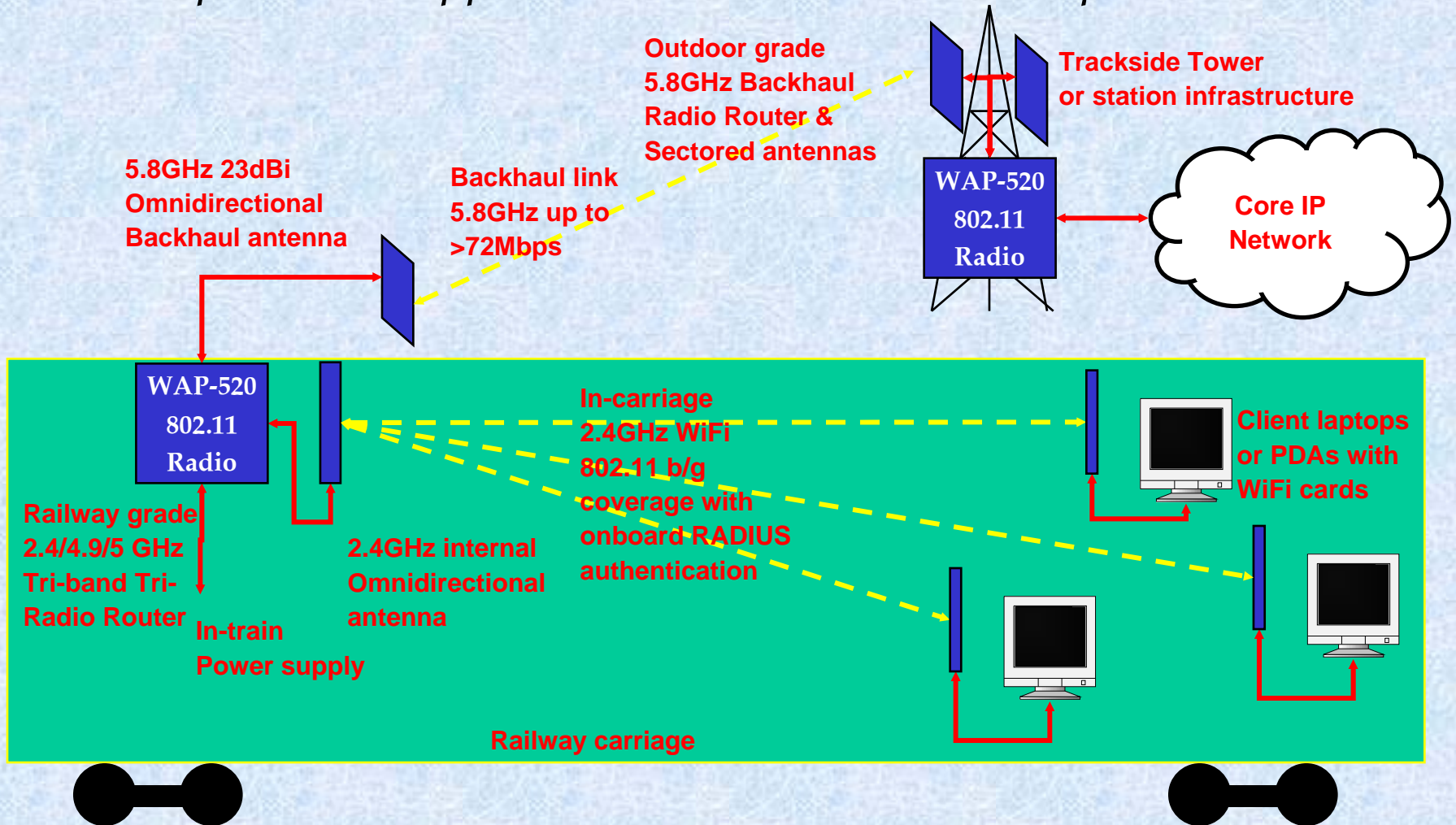
BWA/WISP– Many features, dual radios & b/w controls





WAP-520 in Transportation

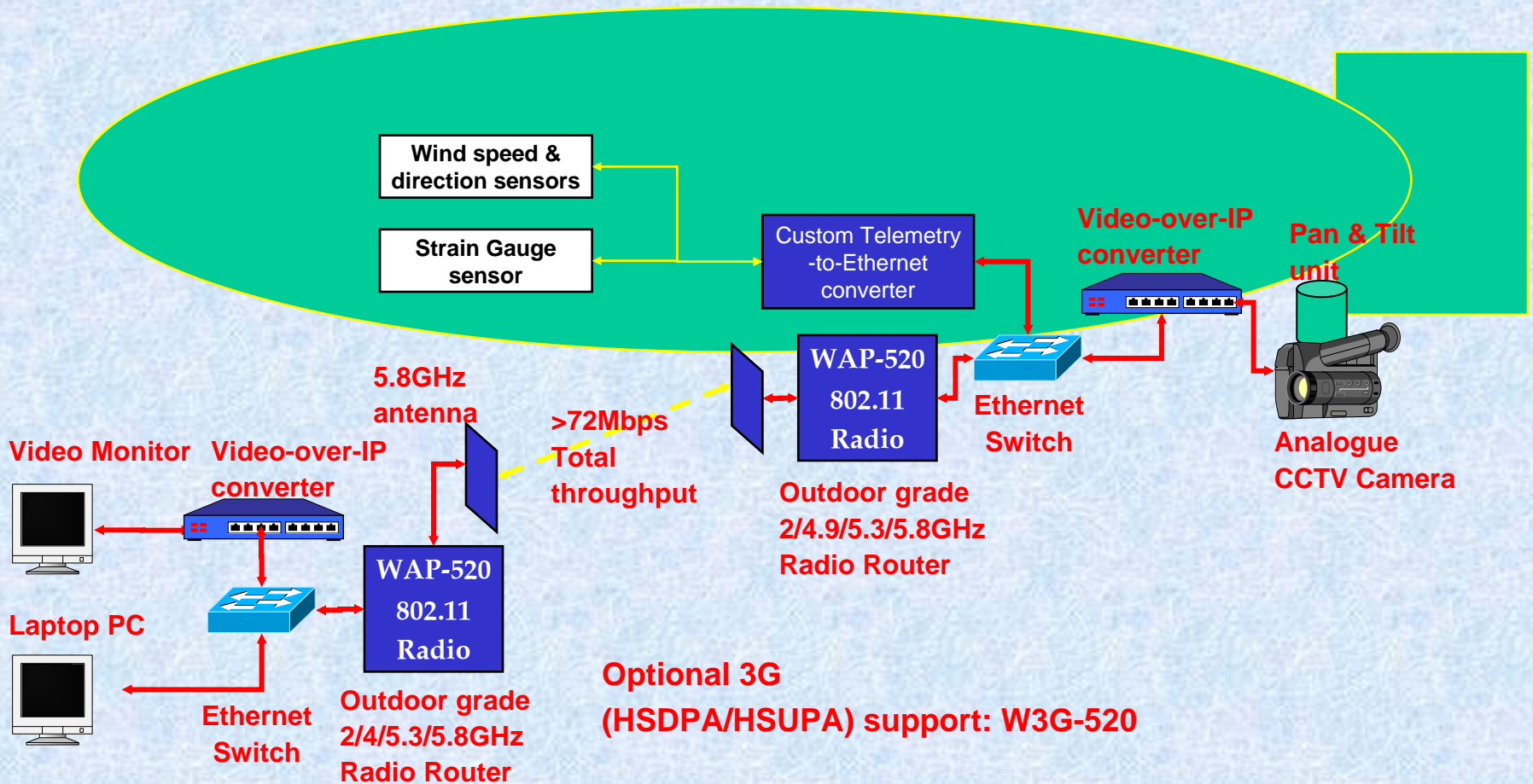
Transportation Applications – Backhaul & Hotspot in 1 unit





WAP-520 Airborne Video Links

Wireless Video & telemetry for airborne applications





WAP-520 Radio Solutions

Radio Features & Highlights

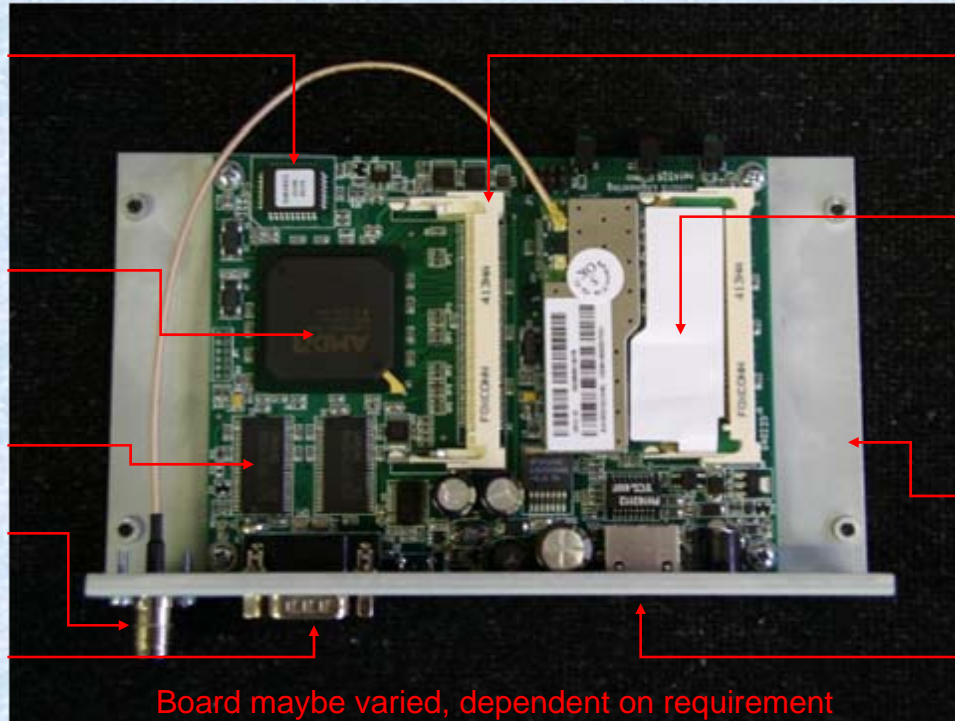
64Mbyte Flash ROM
contains firmware –
powerful features
& easy remote upgrades

Powerful 800 MHz
MIPS-class CPU –
Low heat dissipation

128 Mbyte SDRAM

RF uplink connectors to
1-3 antennas

RS232 Console port for
configuration



Board maybe varied, dependent on requirement

Slots for 1-3
802.11a/b/g radios

Multi-band 2.4 / 2.8 / 3.5 /
/ 4.9 / 5GHz

Atheros™ Radios offer
108Mbps 'Turbo' mode
using OFDM, excellent
ACK and sensitivity

Designed to mount in
external-grade IP67
enclosure

3 X 10/100 Ethernet
ports with 24V
High Power-
over-Ethernet



WAP-520 Radio Solutions

Firmware Features & Highlights

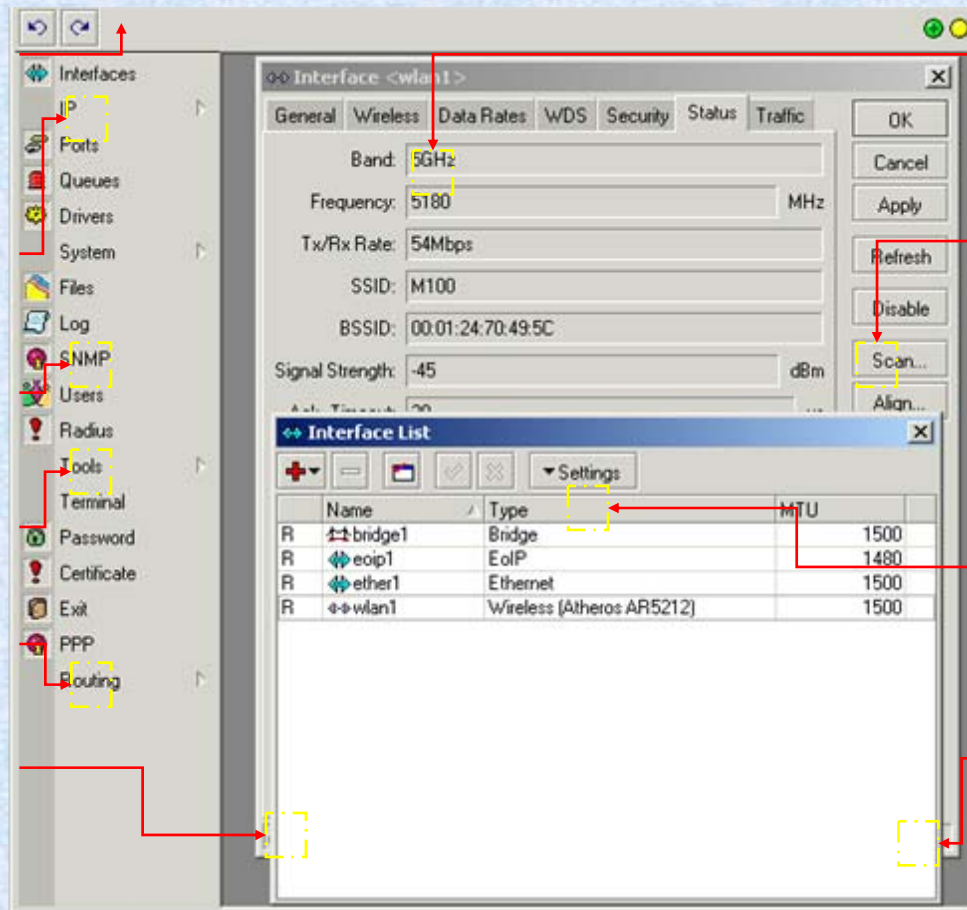
Windows GUI or
Command-line Interface
over RS232 or Telnet

Comprehensive L1/2/3
networking, IP routing,
and mesh features

SNMP, CLI & proprietary
Management options

Full diagnostic toolset

Advanced routing
includes
VRRP for high
availability.
Windows API operates
over Ethernet LAN/WAN



Comprehensive stats
for radio and Ethernet
interfaces

Multiple wireless
features
include WDS, AP, DFS,
virtual-AP and full-
duplex
links using 2 radio cards

Control of each
interface,
bridge & routing
functions

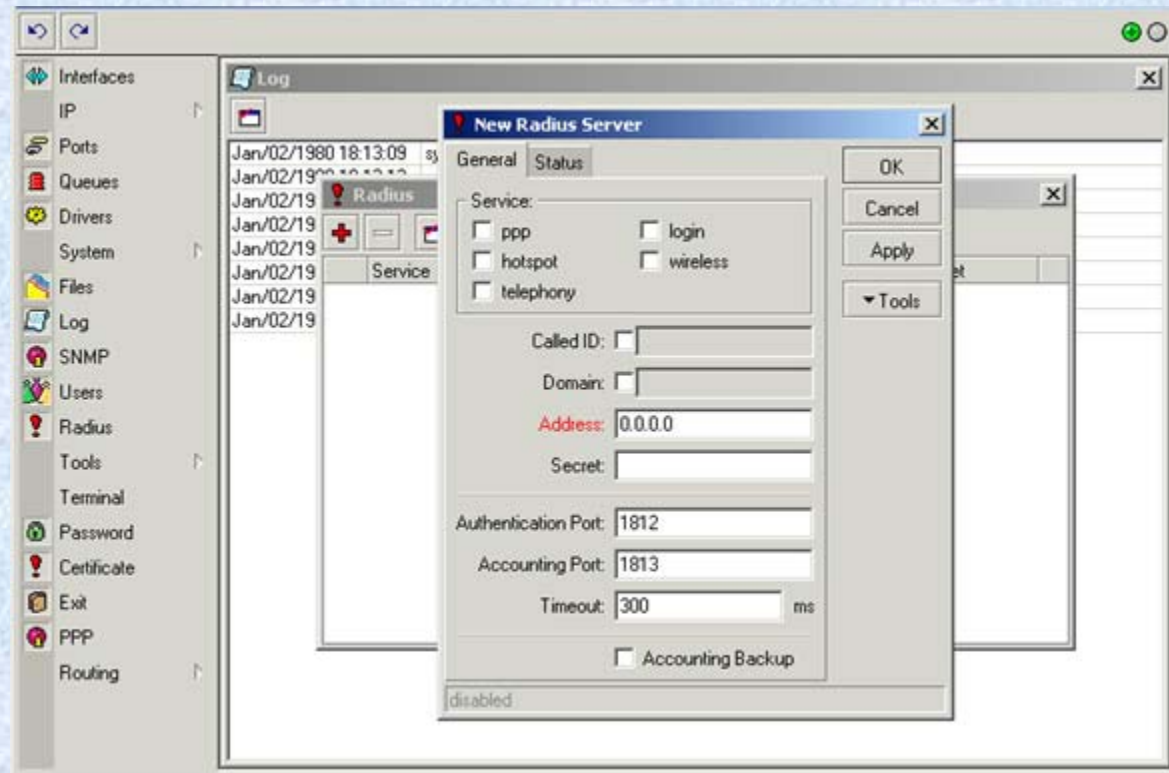
Powerful carrier-grade
router at no extra cost!



WAP-520 Radio Solutions

Security Features & Highlights

- 64/128 / 152 bit WEP
- WPA/WPA2/AES-TKIP/IPSec
- On-board Radius Server
- Hidden SSID option
- Allow only known MAC addresses
- Proprietary packet protocol significantly improves both throughput and security





WAP-520 Radio Solutions

Summary

- Flexible 900MHz / 2.3-2.7 / 3.5-3.65 / 4.9-5.8GHz multi-radio platform
- Best-in-class radio technology (sensitivity & throughput)
- High quality Router hardware platform
- Carrier-Class software
- Outdoor Radio unit case for wall/pole/tower mounting
- Wide choice of antennas
- High Power-over-Ethernet at 24V
- Suited to P2P, PMP, Hotspot, Mesh, WLAN and BWA applications

For more information,
please contact info@wiborne.com



WAP-520 3G / Wifi Solutions

Summary

- Full functions from WAP-520 supported, with additional 2 USB slots for 3G and external disk space.
- Hotspot walled garden with redirection of authentication
- User Manager for hotspot users
- External authentication such as RADIUS and Vendor Specific Attributes (VSA)
- 3G USB interface for HSDPA/UMTS GSM/GPRS/EGPRS EVDO HSUPA with variety of 3G modem vendors.
- Multi-WAN for redundancy
- Indoor and Outdoor versions available



Indoor



Outdoor

For more information,
please contact info@wiborne.com