

# Proxim 802.11n Access Points





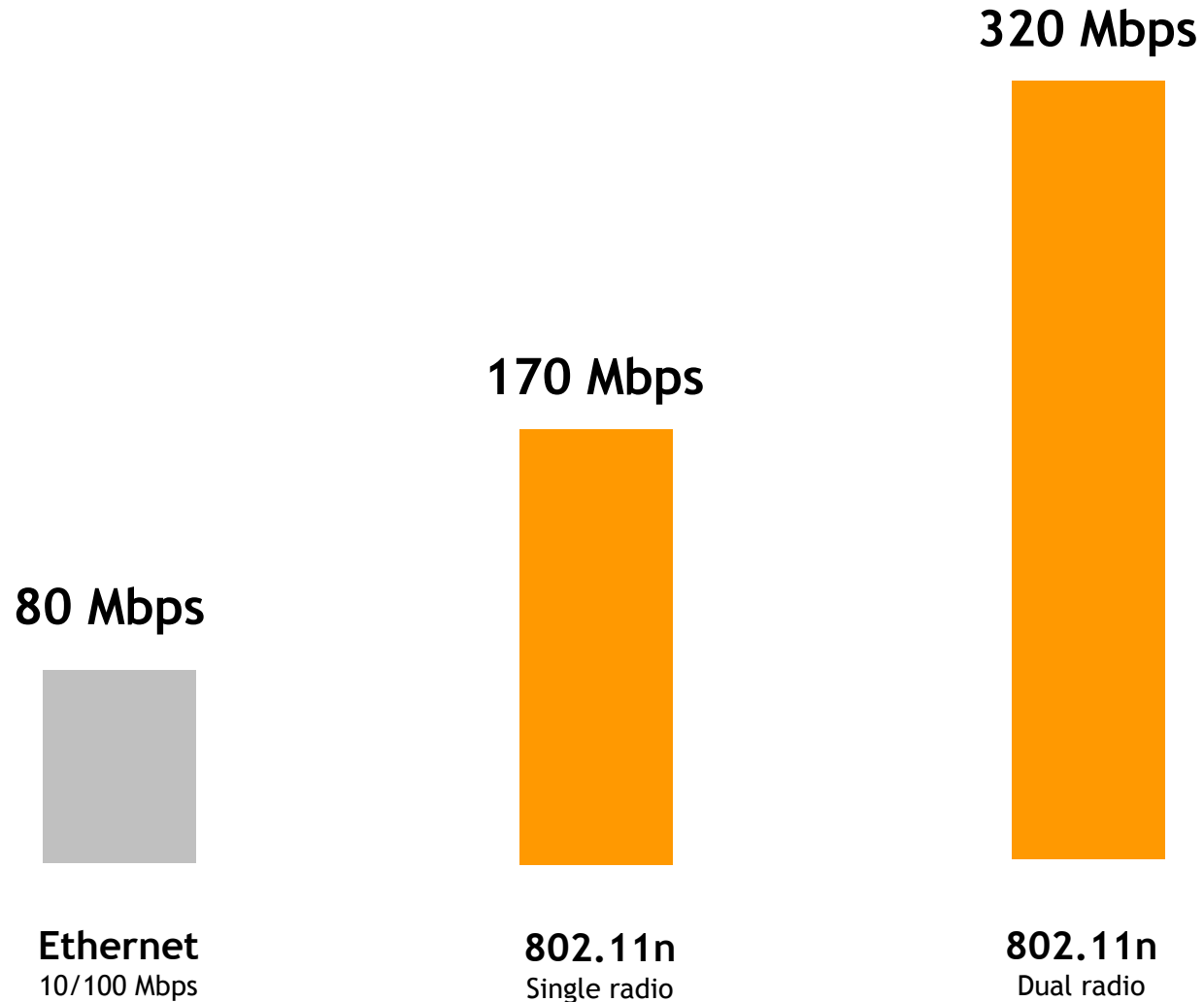
**ORiNOCO  
AP-8000**

Dual-radio high performance  
802.11a/b/g/n AP



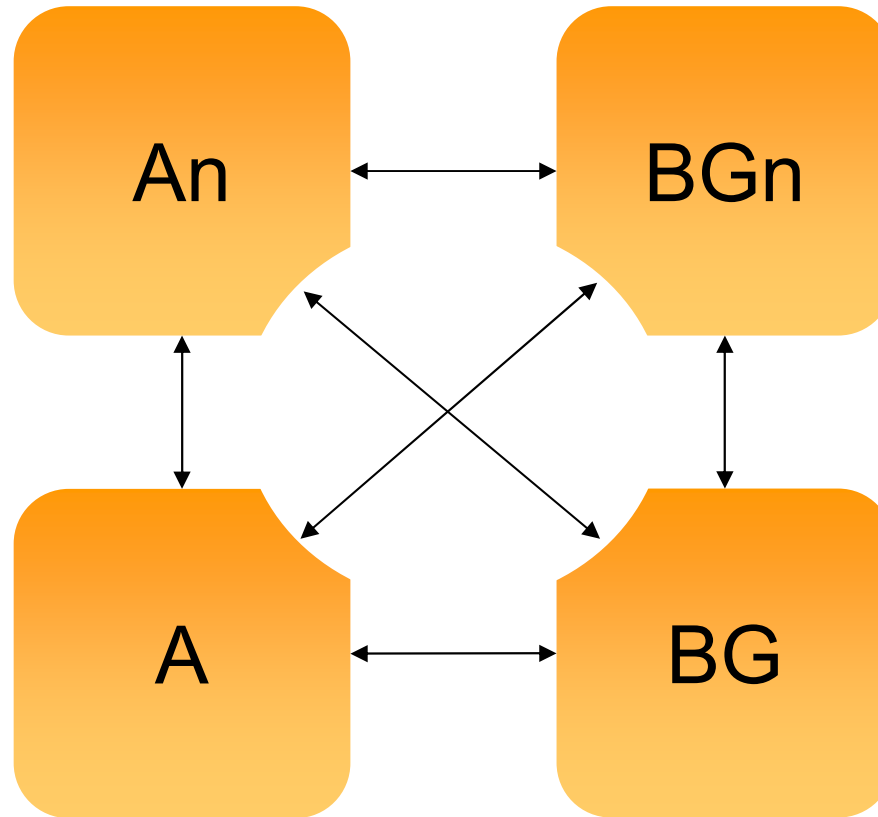
**ORiNOCO  
AP-800**

Single-radio high performance  
802.11a/b/g/n AP

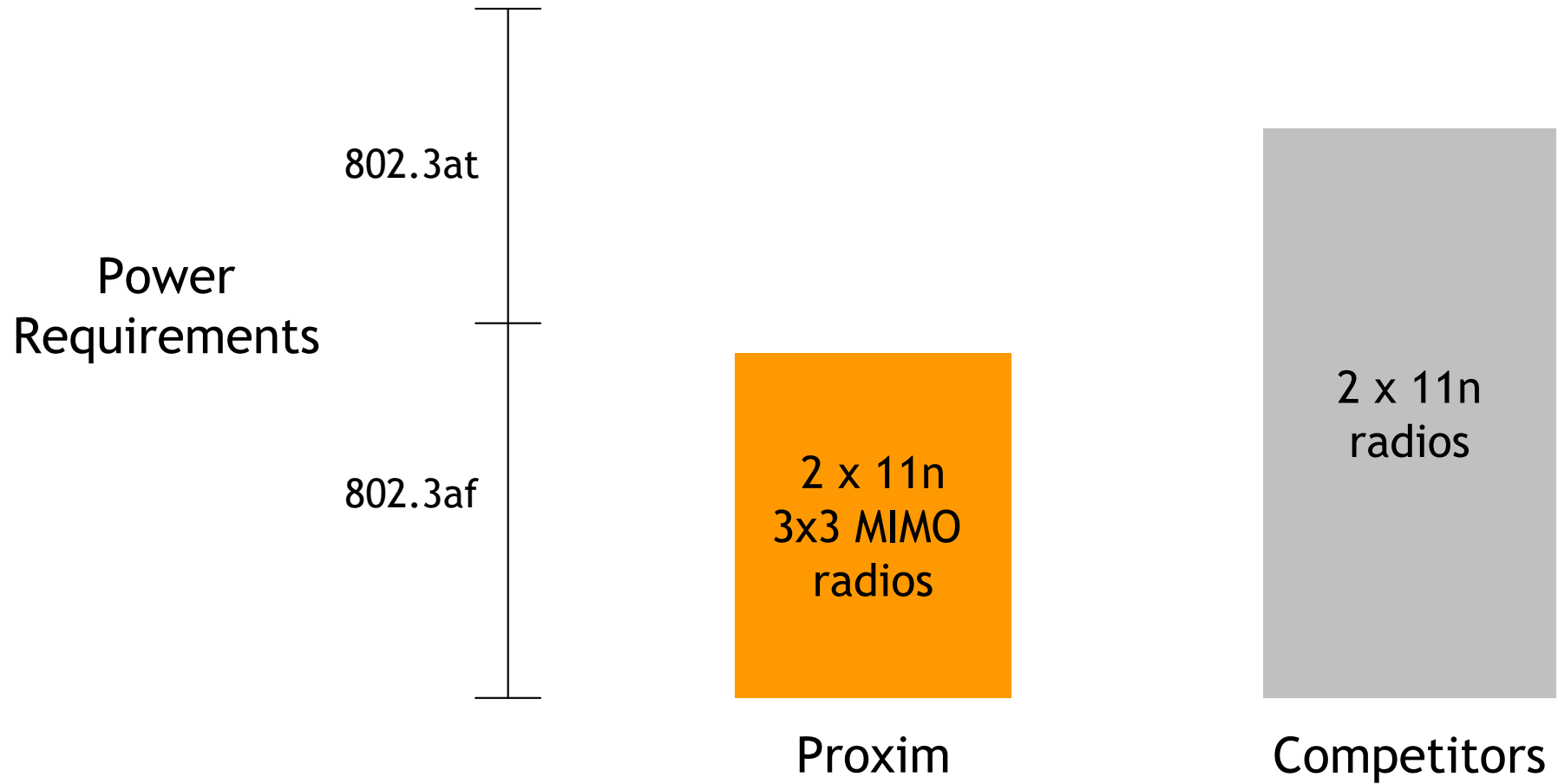


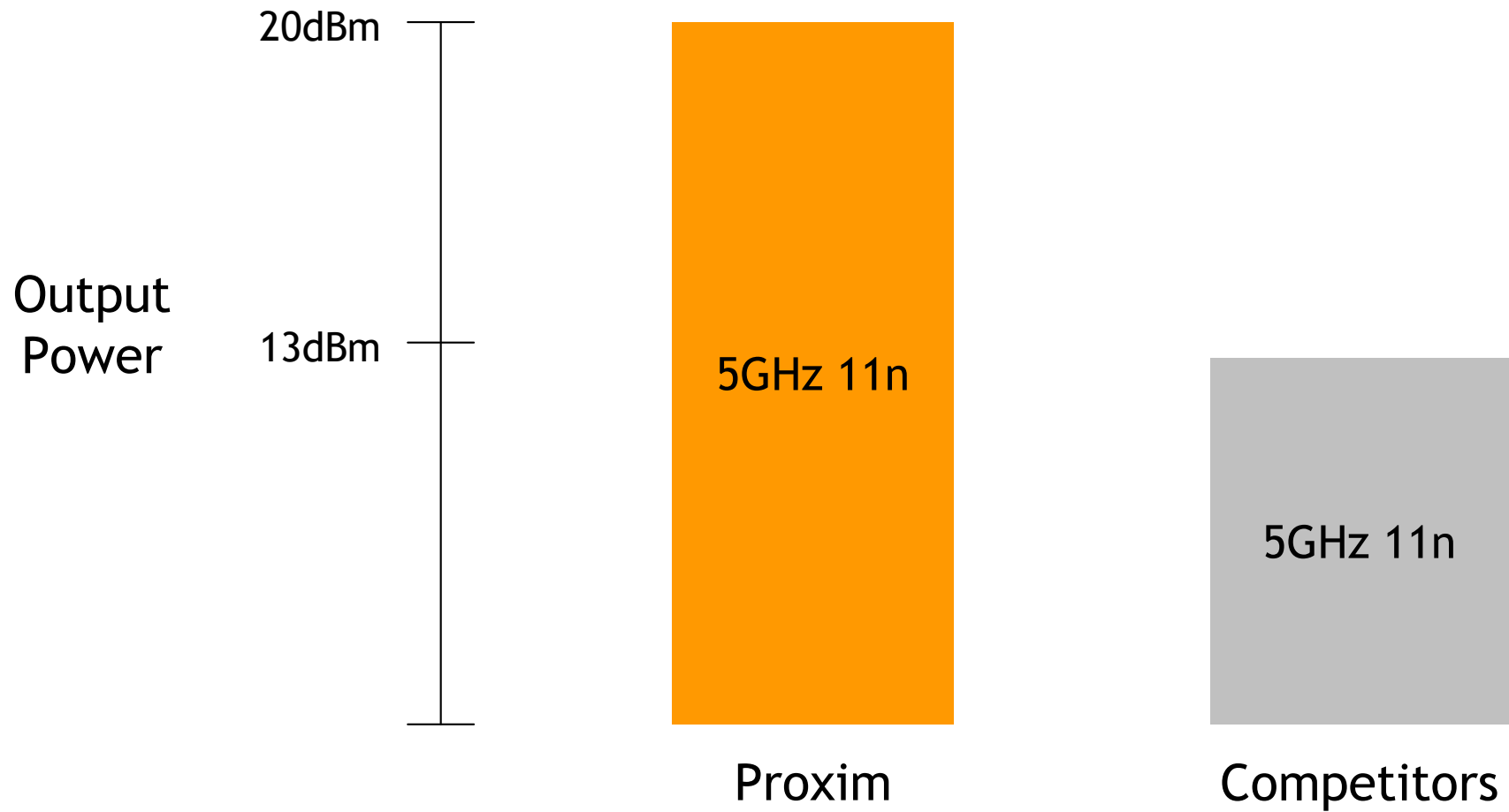
## 10/100 LAN Throughput vs AP800/8000 Throughput

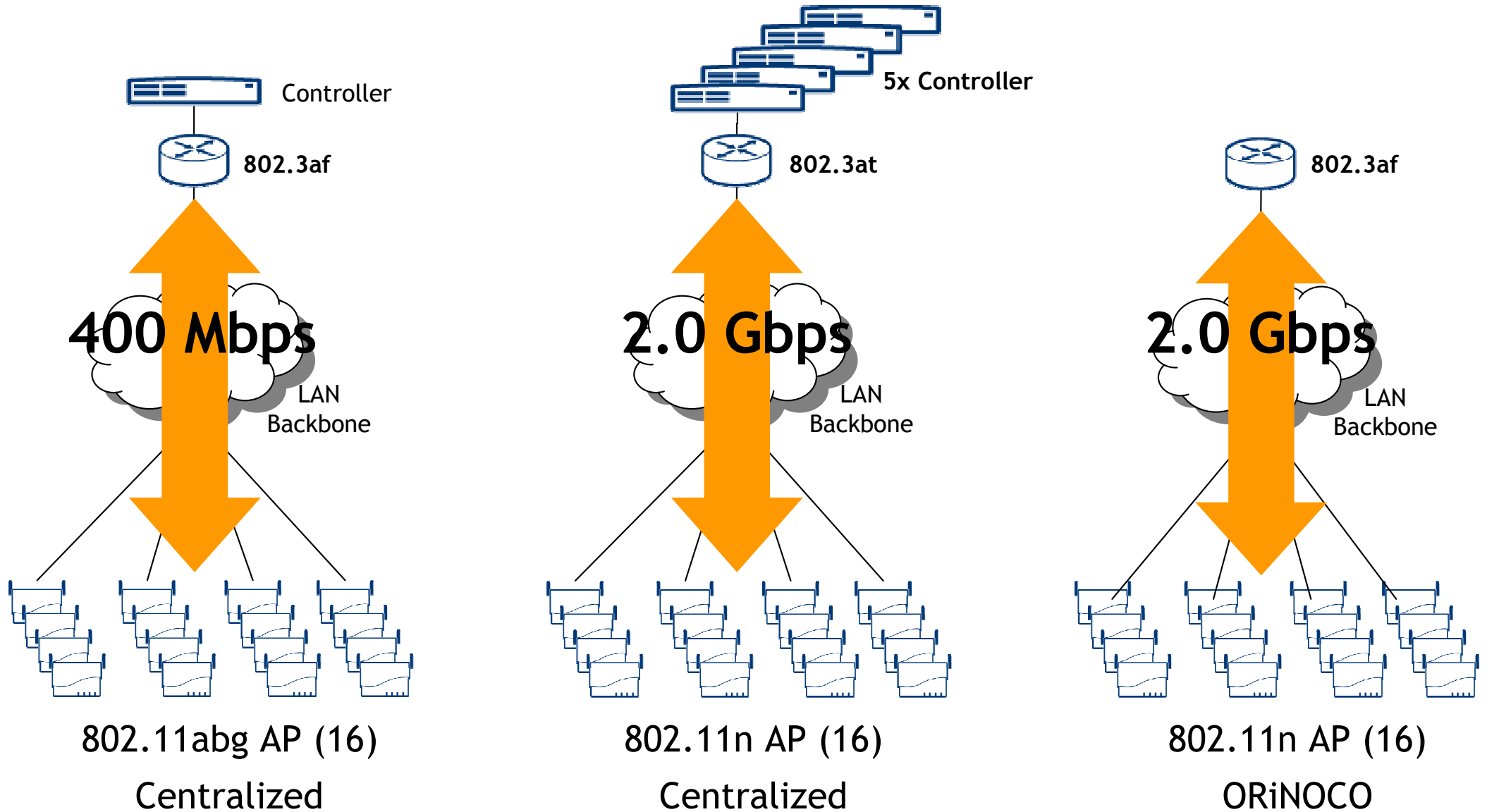
\*Note: AP800 tested using Ixia Chariot with an Intel 4965 3x3 client over the air



An+An, BGn+BGn, An+BGn, An+A, An+BG, BGn+A, BGn+BG, A+BG, A+A, BG+BG,







- **Higher Performance than Existing Wired LANs/WLANs**
  - Highest throughput with single radio rates of over 170Mbps and dual radio rates of 320Mbps
  - The only solution to provide dual 2.4 GHz and dual 5GHz operation
  - The first solution certified to work for the entire 5 GHz spectrum worldwide
- **Greatest Ease of Use**
  - Can be simply be swapped out and replaced using existing Proxim mounting hardware
  - No additional wiring or power injectors are needed
  - Backward compatible with all existing Wi-Fi 802.11a/b/g and 802.11b/g clients
- **Half the Price of Existing WLANs**
  - The only 802.11n APs that are completely 802.3af compliant in all configurations, which avoids the cost of additional wiring as required by 802.3at compliant APs
  - Two times the range of standard 802.11a/b/g APs, which simplifies RF deployment
  - Does not require costly WLAN controllers, enabling cost-effective scalability



# ***ORiNOCO AP-800/AP-8000*** **Hardware Overview**

- Single-Radio 802.11a/b/g/n Access Point
- Software configurable Wi-Fi modes
- Wi-Fi certified
- 802.3af and AC power
- One GigE interface
- 3x3 MIMO (software configurable to other MIMO configurations)
- R-SMA Antenna Connectors
- Dual-band (2.4GHz and 5GHz) Antennas
- Cable Security Cover
- Kensington Lock support
- Wall/Ceiling mount
  - Same as AP-4000/AP-700



- Dual-Radio 802.11a/b/g/n Access Point
- Software configurable wi-fi modes
- Simultaneous Dual 5GHz 802.11n support
- Wi-Fi certified
- 802.3af and AC power
- One GigE interface
- 3x3 MIMO (software configurable to other MIMO configurations)
- R-SMA Antenna Connectors
- Dual-band (2.4GHz and 5GHz) Antennas
- Plenum Rated
- Cable Security Cover
- Kensington Lock support
- Wall/Ceiling mount
  - Same as AP-4000/AP-700



- AC Power
- Gigabit Ethernet
- Serial RS-232 connector
- LEDs
  - Power
  - Ethernet
  - Wireless 1
  - Wireless 2
- Cable Security Cover
- Kensington Lock
- R-SMA antenna connectors
- Wall/Ceiling Mount
- Reset and Reload Buttons



- Freescale PPC 667MHz Processor
  - Advantage: High Performance
- 256MB RAM
  - Advantage: High performance with future software upgrades
- 16MB flash
- Plenum Rated
- Any combination of frequencies and Wi-Fi modes (802.11abgn) support (subject to country regulations)
- 802.3af Support

- Mini-PCI radios - 3x3 MIMO
  - MRC
  - Spatial Multiplexing
- Tx Power - upto 19.5dBm
- Recv Sensitivity - TBD
- Protocols
  - 802.11n draft 2.0
  - 802.11a/b/g
- Frequency (subject to country regulations)
  - 5.15-5.85GHz
  - 2.4-2.483 GHz
- Modulations
  - MCS0 - MCS15 for 802.11n (6.5Mbps - 300Mbps)
  - BPSK, QPSK, 16-QAM and 64-QAM for 802.11a and 802.11g (6Mbps-54Mbps)
  - DSSS for 802.11b (1Mbps-11Mbps)

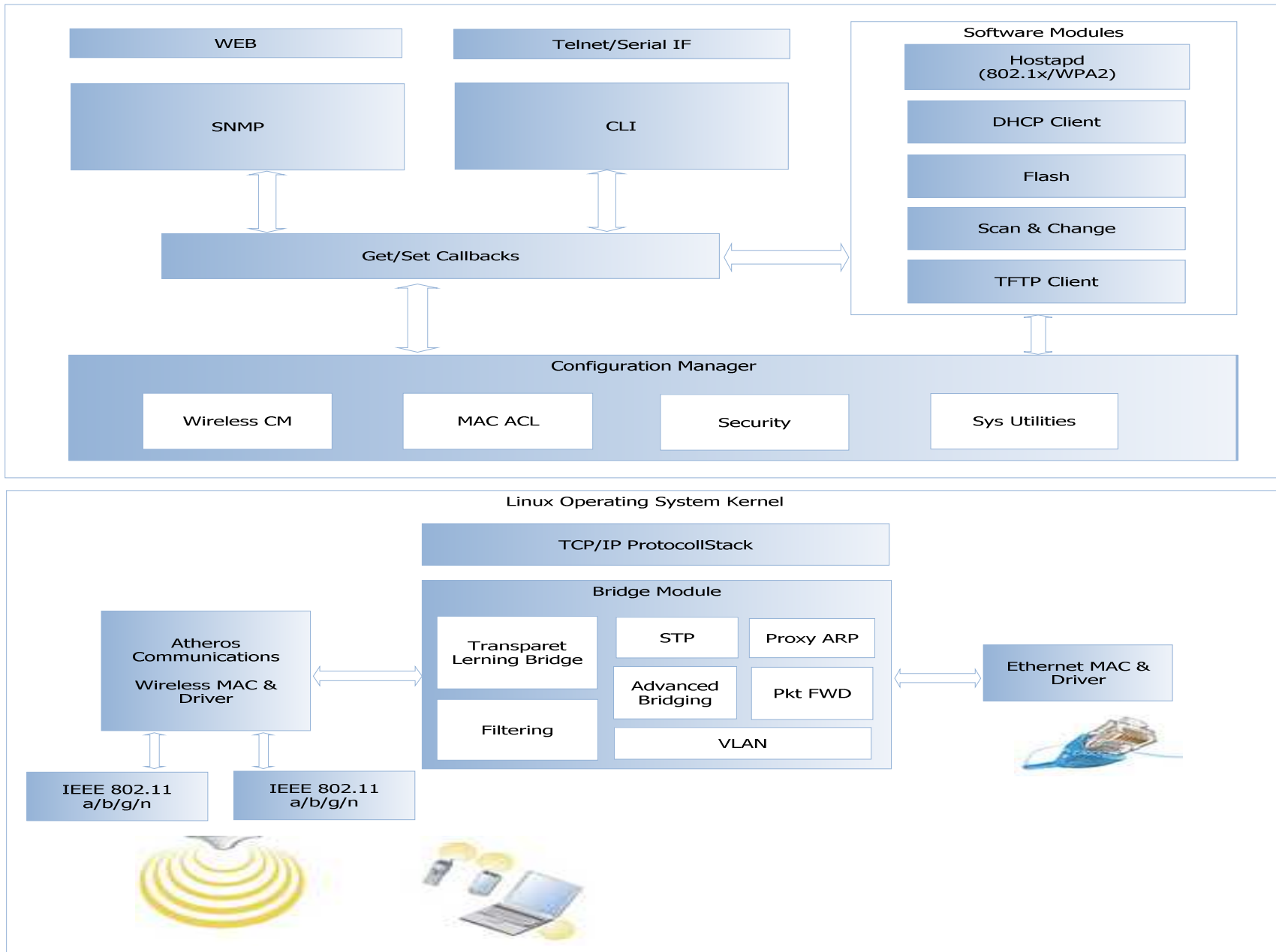
- Dual-Band Omni-directional Antenna with RP-SMA connector
- 2400-2500MHz
  - Peak Gain 2.5dBi
  - Average Gain 1.5dBi
- 4900-5875MHz
  - Peak Gain 5dBi
  - Average Gain 3dBi



- Operating
  - 0 to 55°C
  - 5 to 95 percent (non-condensing)
- Storage
  - -20° to 75°C
  - 5 to 95 percent (non-condensing)



# ***ORiNOCO AP-800/AP-8000*** **Software Overview**



- Enterprise Wi-Fi Certified
  - 802.11n Draft 2.0
  - WPA2
  - WMM
- Configurable Radio Characteristics
  - Frequency bands
  - Wi-Fi mode
  - Tx Power back off

- SNMPv1 and SNMPv2c
- DHCP/BootP
- Telnet CLI
- HTTP
- TFTP (for firmware and other files upload/download)
- SNTP
- Scan & Change
- Syslog
- Secure Management
  - SSH
  - HTTPS
- Serial CLI

- 802.11i/WPA2
- Encryption
  - AES
  - TKIP
  - WEP-64 and WEP-128
- Authentications
  - 802.1x
- MAC Access Control
- Intra-Cell Blocking
- Filtering

- Multiple SSID and BSSID
- Auto Channel Select
- Dynamic Frequency Selection (DFS)
- 802.11d support
- Transmit power control
- WMM support
- Cell Size Control
- Closed system
- Configurable fragmentation threshold for interference robustness
- Configurable DTIM period and Beacon Interval
- 11n related features
  - Configurable rates
  - Configurable Guard Interval

- IEEE 802.1d Bridging
- VLAN Support
- Protocol Filtering
- TCP/UDP Port Filtering
- Intra-BSS Clients blocking
- MAC Pair Filtering
- VPN filtering

- Alarms
- SNMP Traps
- Bridge statistics
- wireless statistics
- Wi-Fi station statistics per client per SSID
- Learn table Statistics
- ICMP statistics
- IP ARP statistics
- Radius statistics
- Interface statistics



- OEM Customization Support
- License File mechanism & Signature Check
- Reset/reload Functionality
- Tech Support Feature - Debug & Help Module (syslog also)
- Health/Task/Memory Monitor Watchdog
- Regulatory Domain & Country Code Support

- SNMPv3
- Rogue Device detection
- RADIUS Based Management Access
- WDS
- Spanning Tree
- Only 8 VLANs per radio (instead of 16 per radio in AP-4000)
  - 8 BSSID per radio (instead of 4 per radio in AP-4000)
- RADIUS based MAC Address Authentication
- Multiple Security per SSID
- Inter Access Point Protocol (IAPP)