



EXRP10 AP  
EXRP20 AP



# UltraThin™ Access Point

## OVERVIEW

Extricom's UltraThin™ Access Points (APs) are a key component of its patented Interference-Free™ architecture. UltraThin™ APs are high-bandwidth devices, containing multiple standard 802.11 a/b/g radios. There is no need for user configuration or maintenance, since they contain no software. The APs utilize standard Wi-Fi protocols (IEEE 802.11), and are completely client-agnostic, supporting any standard, off-the-shelf client network interface card (NIC).

The Extricom unique Interference-Free™ architecture completely avoids co-channel interference, overcoming one of the greatest limitations of traditional WLAN systems. With no co-channel interference, the need for cell planning and RF site surveys and maintenance is eliminated.

The Extricom architecture is indifferent to the placement of individual APs. UltraThin™ APs are powered by standard IEEE 802.3af Power over Ethernet (PoE), and can be placed where most convenient (typically at the network connection). The result is a truly "plug and play" deployment.

Extricom's patented TrueReuse™\* technology delivers optimal frequency reuse on each channel. Since each AP supports multiple simultaneous channels, multiple optimized channel coverage is provided in every location throughout the enterprise. Dynamic and ubiquitous load balancing further optimizes the available RF resources, and the result is an unparalleled total aggregate capacity.

Extricom's Interference-Free™ architecture is perfectly suited for any dense WLAN deployment. The Interference-Free™ architecture allows APs to be placed as close together as necessary to provide complete coverage at the desired data-rate. This provides complete "blanket" coverage, with no "black holes" or areas of poor reception. Zero-latency roaming technology complements the blanket coverage with secure and total user mobility throughout the enterprise. Therefore, Extricom's WLAN is perfectly suited for real-time, mission-critical applications such as voice over WLAN (VoWLAN).

## FEATURES AND BENEFITS

### WiFi Collaboration™

#### Enterprise-wide WLAN deployment:

When combined with the Extricom Wireless Switch, Extricom APs enable the Interference-Free™ architecture, providing complete coverage at the maximal data rate with zero-latency roaming. Collaborating APs overcome RF unpredictability to provide a highly resilient WLAN network. Using patented WiFi Collaboration™ technology, more APs may be added at will, without RF site surveys or co-channel interference. Thus, deployments scale up seamlessly.

### Multiple Radios

#### Increased capacity and load balancing:

Each AP includes multiple a/b/g radios, providing two simultaneous high-data-rate coverage blankets. This multiplies the capacity and number of users throughout the enterprise. Multiple channels enable ubiquitous, dynamic load balancing, and the assignment of voice and data traffic to different channels.

### TrueReuse™\*

#### Optimal frequency reuse:

Extricom's APs support highly granular transmission power control (TPC). Packet-by-packet TPC enables the patent-pending TrueReuse™ technology, providing dynamic optimal frequency reuse with high spatial density, greatly increasing the capacity and the number of users per channel.

### UltraThin™ AP

#### Reduced deployment and maintenance costs:

Extricom's UltraThin™ APs allow 'plug-and-play' deployment and there is no need for AP maintenance. With no software at the AP, there is no need to reboot, reconfigure, and it is never a security hazard. In addition, The AP enjoys much longer MTBF.

### Central Power Supply

#### Reduced cabling costs and total central control:

Extricom's APs are powered by IEEE 802.3af Power over Ethernet (PoE). Thus, each AP provides multiple channel coverage, using a single Cat-5 cable.

## SPECIFICATIONS

WLAN Standards	
	IEEE 802.11b, 2.4GHz (short/long preamble support) IEEE 802.11g, 2.4GHz (pure mode) IEEE 802.11a, 5GHz
WiFi Collaboration™ Features (Requires an Extricom Switch)	
	Management and Configuration Authentication Encryption Enhanced Voice over IP (VoIP) Support TrueReuse™* support Load Balancing Quality of Service (QoS) Multiple SSIDs VLAN Tagging
Spectrum	
Number of simultaneous channels	Up to two, regardless of band e.g., two 802.11b channels transmitted simultaneously or one 802.11g and one 802.11a channel transmitted simultaneously
802.11a	24 non-overlapping channels (US) Available channels limited by local regulation 5.15-5.25 GHz 5.25-5.35 GHz 5.505-5.725 GHz 5.725-5.850 GHz
802.11b/g	Available channels limited by local regulation 3 non-overlapping channels (US) 2.400-2.497 GHz
Transmission Power	
802.11a	Max: 18 dBm (limited by local regulation)
802.11b	Max: 17 dBm
802.11g	Max: 15 dBm
Supported Rates	
802.11a	6, 9, 12, 18, 24, 36, 48, and 54 Mbps
802.11g	1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
802.11b	1, 2, 5.5, and 11 Mbps
Receive Sensitivity	
802.11a:	6 Mbps: -88 dBm 9 Mbps: -87 dBm 12 Mbps: -86 dBm 18 Mbps: -84 dBm 24 Mbps: -81 dBm 36 Mbps: -77 dBm 48 Mbps: -73 dBm 54 Mbps: -69 dBm
802.11b/g	1 Mbps: -91 dBm 2 Mbps: -88 dBm 5.5 Mbps: -87 dBm 11 Mbps: -85 dBm 6 Mbps: -89 dBm 9 Mbps: -88 dBm 12 Mbps: -87 dBm 18 Mbps: -85 dBm 24 Mbps: -82 dBm 36 Mbps: -79 dBm 48 Mbps: -74 dBm 54 Mbps: -71 dBm

Typical Range (single AP)	
802.11a	54 Mbps: 18.3 m (60 ft.) 18 Mbps: 45.7 m (150 ft.) 6 Mbps: 64 m (210 ft.)
802.11b/g	11 Mbps: 48.8 m (160 ft.) 5.5 Mbps: 73.2 m (240 ft.) 2 Mbps: 103.6 m (340 ft.) 1 Mbps: 152.4 m (500 ft.) 54 Mbps: 19.8 m (65 ft.) 18 Mbps: 45.7 m (150 ft.) 6 Mbps: 61 m (200 ft.)
Regulations Approval	
Safety	UL 60950-1 EN 60950-1 IEC 60950-1
EMC	FCC Part 15 class B EN 301 489-1-17 VCCI Technical Requirements, V-3/2001.04
Radio (including modular approval)	FCC Part 15 C FCC Part 15 E EN 300 328 EN 301 893 EN 300 440 Japan Type Certificate: Article 2, clause 1, Items 19, 19-2, 19-3, 19-13
Physical Properties	
Dimensions (W x H x D)	195mm x 150mm x 50mm (7.67" x 5.9" x 2")
Weight	400gr (0.8 lb.)
Installation options	Horizontal (desktop) Vertical (wall mount)
LEDs	Power LAN Activity 2 x WLAN Activity (2 colors)
Power	PoE (IEEE 802.3af): 15W Power Supply (optional): 48VDC @ 400mA
Environmental	
Operational	Temperature: 0°C to 50°C (32°F to 122°F) Humidity: 0% to 90%, non-condensing
Storage	Temperature: - 45°C to +85°C (-49°F to 185°F) Humidity: 0% to 90%, non-condensing
Ordering Info	
EXRP10 AP	Single a/b/g radio
EXRP20 AP	Dual a/b/g radio

\* Some features may be available in a future firmware upgrade.

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