

## Centralised WiFi System

### *WAP-2/WAP-4 (Wireless Access Point 2 & 4 Card)*

#### Overview



### About CableFree

Founded in 1997 and with headquarters in London, UK, CableFree is a leading designer and supplier of broadband Wireless communication equipment.

With a complete range of solutions including Radio, Microwave, Millimeter-Wave, Free Space Optics, WiFi and WiMax solutions, customers in over 60 countries have chosen CableFree as the “one stop shop” solution of choice for dependable wireless networking.

### About Centralised WiFi

The CableFree Centralised WiFi product line is purpose-built to deliver robust, reliable connectivity. CableFree innovation makes the All-Wireless Enterprise possible by delivering voice (VoWLAN), data, video, and location services with an always-on, consistent, and mobile Wi-Fi connection to any client, in any environment.

CableFree's technological breakthroughs accomplish what has not been possible before: radically cut the complexity of WLAN, while significantly increasing performance in all critical areas: coverage, capacity, mobility, and Quality of Service.

## Guaranteed Performance

The WAP-2 and WAP-4 UltraThin™ Access Points (APs) are a key component of CableFree's Interference-Free™ Wireless LAN System. This unique solution sets the industry's highest standard for Wi-Fi performance, providing the user with wireless connectivity that is completely mobile and uninterrupted by dropped connections, with guaranteed quality of service for high-bandwidth data, voice, and video applications.

## Guaranteed Service Level

APs are deployed in any density convenient to the enterprise, to achieve both blanket coverage and a guaranteed communications rate to all users. In fact, while other solutions shy away from dense deployments because of their inherent RF obstacles, CableFree's system performance actually increases with AP density.

## Zero Configurations AP

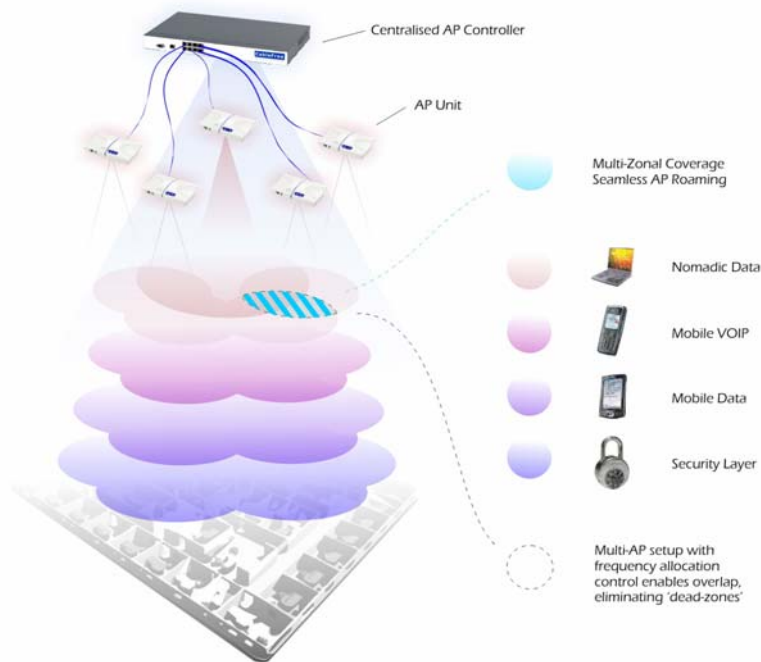
CableFree's UltraThin APs enable true plug-and-play deployment. With no software inside, each AP requires no configuration and is completely interchangeable. There is no need to reconfigure, reboot, or otherwise maintain the AP.

Highly Resistant to RF instability and outside interference

With all APs able to receive on the same channel, the CableFree WLAN provides uplink path diversity for client transmissions, making the system highly resistant to RF instability and outside interference.

## Highly Secure AP

The AP is never a point of possible breach, since all security is performed centrally, at the switch, and the connection between the switch and AP is secure.



## Product Variants & Specs

Specification	Details
WLAN Standards	
WLAN	IEEE 802.11b, 2.4GHz- (short/long preamble support) IEEE 802.11g, 2.4GHz- (pure mode, mixed mode) IEEE 802.11a, 5GHz

Spectrum	
Number of Simultaneous channels	Up to four (WAP-4) or up to two (WAP-2), using any combination of 802.11a/b/g channels
802.11a Available channels	802.11b/g Available channels limited

limited by local regulation	by local regulation
13 non-overlapping channels (US)	3 non-overlapping channels (US)- 2.402-2.472 GHz
5.15-5.25 GHz	3 non-overlapping channels (ETSI)- 2.402-2.482 GHz
5.25-5.35 GHz	4 non-overlapping channels (Japan)- 2.402-2.494 GHz
5.505-5.725 GHz	
5.725-5.850 GHz	
Supported Rates	
802.11a	6, 9, 12, 18, 24, 36, 48, and 54 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, and 54 Mbps
802.11b	1, 2, 5.5, and 11 Mbps
Transmission Power	
802.11a/b/g	Up to 20 dBm
Receive Sensitivity	
802.11a	802.11b/g
6 Mbps: -88 dBm	1 Mbps: -91 dBm
9 Mbps: -87 dBm	2 Mbps: -88 dBm
12 Mbps: -86 dBm	5.5 Mbps: -87 dBm
18 Mbps: -84 dBm	6 Mbps: -89 dBm
24 Mbps: -81 dBm	9 Mbps: -88 dBm
36 Mbps: -77 dBm	11 Mbps: -85 dBm
48 Mbps: -73 dBm	12 Mbps: -87 dBm
54 Mbps: -69 dBm	18 Mbps: -85 dBm
	24 Mbps: -82 dBm
	36 Mbps: -79 dBm
	48 Mbps: -74 dBm
	54 Mbps: -71 dBm
Rogue AP Detection	
Redundancy	Master-to-backup auto fallback
<b>Antenna Specifications</b>	
Each Radio	Two (2) internal omnidirectional antennas for diversity
<b>Regulations Approval</b>	
Safety	UL 60950-1 EN 60950-1 IEC 60950-1 ANATEL Resolution 238
EMC	FCC Part 15 class B EN 301 489 VCCI Technical Requirements, V3/2001.04 ANATEL Resolution 442
Radio (including modular approval)	FCC Part 15 C FCC Part 15 E

	EN 300 328 EN 301 893 Japan Type Certificate: Article 2, clause 1 ANATEL Resolution 506
<b>Physical Properties</b>	
Dimensions (W x H x D)	195 x 125 x 45 mm 7.7 x 4.9 x 1.8"
WAP-2/40	
Weight	
WAP-2	0.40 kg 0.9 lbs
WAP-4	0.45 kg 1.0 lbs
Installation Options	Horizontal (desktop) Vertical (wall mount)
LEDs	WAP-2 Power LAN Activity 2 x WLAN Activity (2 colors)
WAP-4	4 x WLAN Activity (2 colors)
Power	PoE (IEEE 802.3af) Power Supply (optional): 48VDC
Infrastructure	Dedicated radio per AP
Functionality	Automated, continuous monitoring,
Additional Features	Configurable "white list" of allowed BSSIDs
<b>Environmental</b>	
Operational Temperature	: -5°C to +55°C (23°F to 131°F) Humidity: 0% to 95%, non-condensing
Storage	Temperature: - 20°C to +70°C (-4°F to 158°F) Humidity: 0% to 90%, non-condensing
<b>Ordering Information</b>	
CF-WAP-2	CableFree UltraThin Access Point with Dual 802.11 a/b/g radios, internal antennas
CF-WAP-4	CableFree UltraThin Access Point with Quad 802.11 a/b/g radios, internal antennas

T: +44 (020) 8941 7975  
F: +44 (020) 8941 2410  
E: info@cablefreesolutions.com  
W: www.cablefreesolutions.com

CableFree Solutions Limited  
Holly House, St Clare Business Park