

# MAINDEC AND CISCO

## Wireless and Mobility Solutions

### Solutions Overview

**WHAT IS A WIRELESS LAN?** A Wireless LAN allows users to meet and work in any part of a building without being physically attached to the network. It can facilitate network access where previously it was not possible to have access. A Wireless LAN solution is typically deployed as an overlay technology, supplementing the wired network or overcoming problems extending it. It is a cost-effective solution for small offices, offering cheaper installation, maintenance and management than traditional wired infrastructures.

One of the major concerns on a customer's network is the ability to maintain the security of data. Security fears have caused some network managers to avoid installing Wireless LANs (WLANs), regardless of the numerous benefits that they provide. Now the landscape of wireless security has changed, giving IT managers the confidence to deploy WLANs.

#### What are the benefits of a mobility solution?

- Anytime, anywhere network access
- Quick, simple and flexible installation
- Lower cost of ownership
- Provides scalability
- Highly mobile and productive workforce
- Network access in hard to wire areas
- Mobile network access in large open areas
- Easy connectivity in frequently reconfigured areas
- Roaming for network connectivity in a large office environment
- Secure encryption without performance degradation
- Point to Point bridging for remote networks

#### 5 Things to Know

1. Cisco Aironet are the market leaders in Wireless LAN equipment
2. A Cisco Structured Wireless Aware Network (SWAN) can be as secure as a wired LAN. A solution can be put in place to ensure that every security policy the business adheres to is addressed on the Wireless LAN
3. Wireless LAN has a current speed of up to 54Mbps. This is more than adequate for most mobile business applications
4. Wireless LANs will not suffer interference if it is correctly surveyed, installed, commissioned and maintained

### Product Range

1200 Series	1100 Series	1300 Series	350 Series	CB21AG Client Adapter	PI21AG Client Adapter
An Access Point allows Wireless LAN Users to attach to a network backbone <ul style="list-style-type: none"> <li>• 802.11a/b/g support</li> <li>• Enterprise Class</li> <li>• Ruggedised</li> <li>• External Antenna</li> </ul> AIR-AP1230B-EK9 AIR-AP1231G-EK9 AIR-AP1232AG-E-K9	An Access Point allows Wireless LAN Users to attach to a network backbone <ul style="list-style-type: none"> <li>• 802.11a/b/g support</li> <li>• Enterprise Class</li> <li>• Integrated Antenna</li> </ul> AIR-AP1120B-E-K9 AIR-AP1121G-E-K9 AIR-AP1131AG-E-K9	A Wireless Bridge/ Access point provides point to point bridging between remote sites up to 3.5km and client connections <ul style="list-style-type: none"> <li>• Enterprise Class</li> <li>• Ruggedised</li> <li>• External Antenna</li> <li>• Up to 54Mbps throughput</li> </ul> AIR-BR1310G-E-K9 AIR-BR1310G-E-K9-R	A Wireless Bridge/ provides point to point bridging between remote sites up to 3.5km <ul style="list-style-type: none"> <li>• Enterprise Class</li> <li>• Ruggedised</li> <li>• External Antenna</li> <li>• Up to 11Mbps throughput</li> </ul> AIR-BR350-E-K9	CardBus client adaptor allows mobile devices access to a Wireless LAN <ul style="list-style-type: none"> <li>• 802.11a/b/g support</li> <li>• Enterprise Class</li> <li>• Secure</li> </ul> AIR-CB21AG-E-K9	PCI client adaptor allows desktop PCs access to a Wireless LAN <ul style="list-style-type: none"> <li>• 802.11a/b/g support</li> <li>• Enterprise Class</li> <li>• Secure</li> </ul> AIR-PI21AG-E-K9

### Complementary Products

- Cisco Secure Access Control Server (CSACS) can be utilised to provide Authentication, Authorisation and Accounting for wireless users
- Cisco PIX Firewall and VPN Concentrators can be deployed for end-to-end VPN connectivity for wireless users
- Cisco Wireless LAN Solutions Engine (WLSE) is a centralised management platform for managing an entire WLAN infrastructure
- Wireless IP Telephones from Cisco and Spectralink enable Voice over Wireless LAN
- PowerDsine Midspan devices provide Power over Ethernet (PoE) to all 802.3af devices



## Glossary of Terms

<b>802.3af</b>	Power over Ethernet standard	<b>FHSS</b>	Frequency Hopping Spread Spectrum – Cisco do NOT support this transmission method
<b>802.11a</b>	Provides up to 54Mbps in the 5Ghz band	<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>802.11b</b>	Provides up to 11Mbps in the 2.4Ghz band	<b>RF</b>	Radio Frequency
<b>802.11g</b>	Provides up to 54Mbps in the 2.4Ghz band	<b>WECA</b>	Wired Ethernet Compatibility
<b>AES</b>	Advanced Encryption Standard	<b>WEP</b>	Wired Equivalent Privacy
<b>AP</b>	Access Point	<b>Wi-Fi</b>	Wireless Fidelity
<b>DSSS</b>	Direct Sequence Spread Spectrum – Cisco support this transmission method	<b>WLAN</b>	Wireless Local Area Network
<b>EAP</b>	Extensible Authentication Protocol	<b>WPA</b>	Wi-Fi Protected Access
<b>ETSI</b>	European Telecommunications Standards Institute		

Product Set Product Type	1200 Access Point	1100 Access Point	350 Bridge	1300 Bridge	Client Cards PCMCIA, CardBus and PCI
<b>Standards</b>					
802.11a	Yes	Yes	No	No	Yes
802.11b	Yes	Yes	Yes	Yes	Yes
802.11g	Yes	Yes	No	Yes	Yes
Maximum Data Rate	54mbps	54mbps	11mbps	54mbps	54mbps
10/100 Ethernet Yes	Yes	Yes	Yes	N/A	
Power over Ethernet	Yes	Yes	Yes	No	N/A
Virtual LAN	Yes	Yes	No	Yes	N/A
Quality of Service	Yes	Yes	No	Yes	N/A
SNMP	Yes	Yes	Yes	Yes	N/A
<b>Security</b>					
WPA	Yes	Yes	No	Yes	Yes
WPA2	Yes	Yes	No	Yes	Yes
WEP	Yes	Yes	Yes	Yes	Yes
802.11i	Yes	Yes	No	Yes	Yes
AES	Yes	Yes	No	Yes	Yes
802.1x	Yes	Yes	Yes	Yes	Yes
EAP	Yes	Yes	Yes	Yes	Yes
External Antenna Option	Yes	No	Yes	Yes	Yes
Integrated Antenna Option	No	Yes	No	Yes	Yes
Warranty	1 year	1 year	1 year	1 year	1 year

## Useful Links

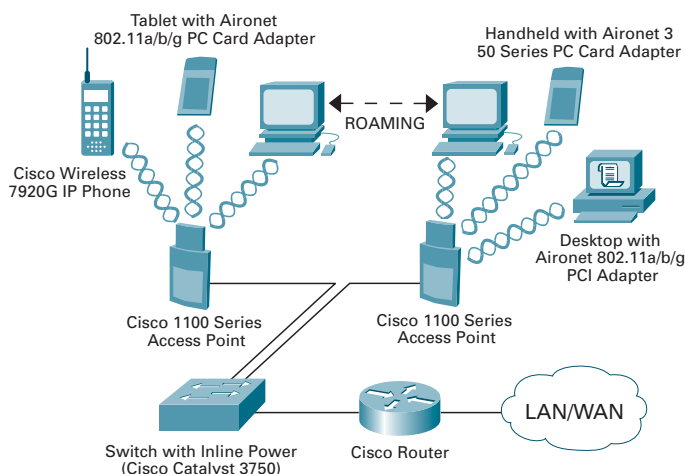
**Cisco Aironet Wireless LAN Solutions**  
[www.cisco.com/go/aironet](http://www.cisco.com/go/aironet)

**Cisco SWAN (Structured Wireless Aware Network)**  
[www.cisco.com/go/swan](http://www.cisco.com/go/swan)

**Cisco Works Wireless LAN Solutions Engine**  
[www.cisco.com/go/wise](http://www.cisco.com/go/wise)

**Cisco secure Access Control Server**  
<http://www.cisco.com/en/US/products/SW/secursw/ps2086/index.html>

**Cisco Aironet Antenna Reference Guide**  
[http://www.cisco.com/warp/public/cc/pd/witc/ao340ap/prodlit/airoa\\_ds.htm](http://www.cisco.com/warp/public/cc/pd/witc/ao340ap/prodlit/airoa_ds.htm)



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