



RFNet Technologies Pte Ltd

Product Specifications

Professional Outdoor 2.4GHz Wireless Bridge (With Access Point)



AP-1010-LT/GD_{i/c}

Revision: 02-02

Updated: 4 Jun 2007

-
- Specification are subject to changes without prior notice due to engineering improvement.
 - All brands and product names are trademarks or registered trademarks of their respective holders.
 - Wireless range and performance may vary with environment.

Table of Contents

1	Wireless and Ethernet	1
2	Security and Access Control	2
3	Management	4
4	Monitoring	4
5	Physical, Electrical and Environment	5
6	Appendix A: Factory Default	6
7	Appendix B: Standard Packaging	7

Model Explanation

AP-1010-GD (Gold) is a wireless bridge with Access Point features.

AP-1010-LT (Light) is a wireless bridge CPE only.

Model "i": Industrial model,

For country require extreme operating temperature from -30C ~ +60C. (Such as Europe and North America).

Model "c": Commercial model,

For country accept operating temperature from 0C ~ +60C (such as south Asia).

1 Wireless and Ethernet

Features	AP-1010-GD	AP-1010-LT
Frequency	2400~24835MHz	
Max Radio TX Output	Up to 20dBm	
Data rate, with Auto Fall Back	108Mbps	
Modes Supported	AP, CPE	CPE
IEEE Wireless Standard	802.11b/g	
IEEE Ethernet Standard	802.3, 802.3u (CSMA/CD)	
Power Over Ethernet (PoE)	√	
PoE Type	Passive PoE, non-3af compliant	
Modulation	DSSS, DQPSK, DBPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM	
Channels	12 (USA/Canada), 13 (Asia, Europe except France), 14 (Japan)	
Channel frequency step size	5MHz	
Best Channel Scanning at Power up	√ (AP Mode only)	N/A
Radio Channel Select	Determine by AP	
Radio Power Control (3dB steps)	5 level from Max	
Transmitter Spectral Masks	ETSI EN 301893	
Transmitter spurious Emission	ETSI EN 301893	
RX Sensitivity	-95dBm @ 1Mbps	
	-91dBm @ 2Mbps	
	-92dBm @ 5.5Mbps	
	-90dBm @ 6Mbps	
	-90dBm @ 9Mbps	
	-87dBm @ 11Mbps	
	-88dBm @ 12Mbps	
	-86dBm @ 18Mbps	
	-82dBm @ 24Mbps	
	-79dBm @ 36Mbps	
	-75dBm @ 48Mbps	
	-73dBm @ 54Mbps	

Antenna Type & Antenna Gain	Integrated Directional 14dBi
RX Sensitivity with integrated antenna	-109dBm @ 1Mbps
	-105dBm @ 2Mbps
	-106dBm @ 5.5Mbps
	-104dBm @ 6Mbps
	-104dBm @ 9Mbps
	-101dBm @ 11Mbps
	-102dBm @ 12Mbps
	-100dBm @ 18Mbps
	-96dBm @ 24Mbps
	-93dBm @ 36Mbps
	-89dBm @ 48Mbps
	-87dBm @ 54Mbps
Max Distance	6km, PTP**

** PTP = Line of Sight Point to Point link.

2 Security and Access Control

Features	AP-1010-GD	AP-1010-LT
Static WEP	Max 152 bits	
WPA, 802.1x Support	√ (AP mode only)	N/A
WPA_PSK	Passphrase with TKIP & AES Cipher	
WDS (Wireless Distribution System)	√	
Suppress SSID	√	
Mac Access Control	√	
Configuration file download (Telnet)	√	
SNMP	V ₁ , V _{2c}	
Firmware Upgrade	√	
Filtering	Broadcast & Multicast	
Web Based Management	√	
Configurable Through Telnet	√	
Save last good Setting	√	
Software Reset	√	
Software Factory Reset	√	

Multiple FTP Pass Through	√	
VLAN Transparent	√	
Bandwidth Limiting with QoS*	√	
QoS (priority for Voice and Multimedia)	√	
Wireless Client to Client Isolation	For AP Mode	N/A
LED type (Power = Orange, Link = Green)	High Visibility LED's	
LED blink pattern in CPE mode (client bridge)	System up: solid No link: off <=12Mbps: Blink > 12Mbps: Solid	
LED blink pattern in AP mode (Access Point)	System up: Solid Radio up: Solid Data link: Blink	N/A

*Note: When enabled this feature, the data bandwidth is set, and the balance bandwidth will be used for live data such as video and VoIP packets.

3 Management

Features	AP-1010-GD	AP-1010-LT
Frequency	√	
Bandwidth	√	0
Best AP/BU selection	√ (Client mode only)	√
Auto Associate to AP with same ESSID	√	
Seamless Roaming	√	
DHCP Client, Auto Negotiate for IP	√	
Static IP	√	
Wireless Association Status	√	
Password Access control to configuration	2 Levels	
Ping from Device	Thru Telnet	
Firmware upgrade on the fly (without interfere operation, but need reboot to start new firmware)	√	

4 Monitoring

Features	AP-1010-GD	AP-1010-LT
User pre-set Range between BS for optimum performance	√	
Uplink & Downlink packets & Bytes Counters	√	
Software Version	√	
Hardware Version	√	
MAC Address	√	
Signal Strength	√	
MIR Classification	√	

5 Physical, Electrical and Environment

Features	AP-1010-GD	AP-1010-LT
Weight (estimate)	700g, module only	
Dimension (estimate)	255 x 255 x 55mm	
Power Requirement (estimate)	8W max	
Operating Temperature "i" (industrial model)	-35°C ~ +60°C	
Operating Temperature "c" (commercial model)	0°C ~ +60°C	
Humidity, non condensing	Max 95%	
Wind Speed Support	120km/h	
Casing Sealing	IP65	
Random Vibration (IEC-68-2-64)	√	
Shock (IEC-68-2-29)	√	
Drop (IEC-68-2-32)	√	
Salt Fog (IEC-68-2-11)	√	
Solar Radiation (IEC-68-2-5)	√	
RoHS	√	
Safety	EN 60950	
EMC and RFI	EN301893 + EN301489	
ESD	IEC 61000-4-2	
Lightning Protect at Ethernet Port	√	
Certification	CE	
Warranty	1.5 years	

6 Appendix A: Factory Default

No	Item to Set	AP-1010-GD	AP-1010-LT	Remark
1	Device Mode	Access point	Wireless Bridge	
2	ESSID	11a	11a	
3	WEP	Disable	Disable	
4	User ID (for configuration)	admin	admin	All lower case.
5	Password (for configuration)	admin	admin	All lower case
6	Default static IP address and subnet	Enable	Enable	IP addr: 192.168.1.20 Subnet : 255.255.255.0 Default gateway: 0.0.0.0
7	DHCP client	Disable	Disable	When "Static IP" set off
8	Radio Power	100%	100%	Configurable
9	Super User ID (for upgrading of firmware)	super	super	All lower case
10	Password for Super user	super	super	All lower case

7 Appendix B: Standard Packaging

The standard package shall include the following:

1. One AP-1010xx
2. One 48VDC PoE combiner module
3. One power cord
4. 3m RJ45 cable attached with AP
5. Screws and washers for bracket
6. Poll Mounting bracket
7. One CD (User manual)
8. Quick Install Guide