



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

EOR7550 equips with two powerful independent RF interfaces which support 802.11a/b/g and 802.11b/g/n. With certified IP-65 protection, it is designed to deliver high reliability under harsh outdoor environment.

Built-in advanced multi-functions provide flexibility in constructing scalable WiFi networks for all possible applications. With two individual interfaces, each can be configured into 6 different modes with maximum of 18 combinations. With 802.11n support, EOR7550 offers bandwidth up to 300Mbps to accommodate heavy traffic services such as multimedia streaming. Establishing backbone network using 802.11a ensures stability and reduces interference while 802.11b/g offers great compatibility to all wireless clients.

EOR7550 provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce maximum security. Furthermore, friendly security management user interface reduces configuration complexity. EOR7550 is a true carrier-grade product which is guaranteed to fulfill any business proposals.



Package Content

- 1 x Dual Radio Multi-Function Repeater (EOR7550)
- 1 x PoE injector with Power Adapter
- 1 x Wall Mounting kit
- 1 x 1.8m Grounding Cable
- 1 x CD with User's Manual
- 1 x QIG

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

Features

Wireless

- **Dual Radio** Two radio for independent backhaul(a/b/g, Radio1) and local access(b/g/n, Radio2).
- **High Data Rate** High speed physical transmitting rate up to 300Mbps with 11n, support large payload such as MPEG video streaming
- **Multifunction application** Defining each radio configuration for different application
- **Wireless Distributed System (WDS)** Supporting WDS to bridge repeater
- **Multiple SSID** 4 BSSID supported. Primary(1st) BSSID for normal setting follow this router's main default setting for security setting. Each SSID can set itself wireless or WAN access setting.

Networking

- **Public wireless solution** An AP interface that is especially useful in public areas such as hotspots and enterprise
- **Bandwidth Selection** Provides 5MHz/ 10MHz/ 20MHz for 802.11a/b/g and 20MHz/ 40MHz for 802.11n
- **Signal Strength** Display 0%~100% to show the signal condition for more convenient installation and setup.
- **QoS(WMM)** Enhance performance and density

Security

- **802.11i** WPA, WPA2
- **802.1x** EAP-TLS/TTLS, IEEE 802.1x Supplicant support in CB mode
- **MAC address functions** MAC address access control list, MAC address filter

Management

- **Firmware Upgrade** Upgrading firmware via web browser, setting are reserved after upgrade
- **Reset & Backup** Reset to factory default. User can export all setting into a file via WEB
- **MIB** MIB I, MIB II(RFC1213) and private MIB
- **SNMP** V1, V2c

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

Technical Specifications

Hardware Specification	
RF	Atheros AR5414 (Radio1) + Ralink RT2820 (Radio2)
Physical Interface	One 10/100 Fast Ethernet RJ-45 One Reset Button
Power Requirements	Power over Ethernet, 48V DC/0.375A
Regulation Certifications	FCC Part 15C/15B/15E, EN301 893, EN 300 328, EN 301 489-1/-17, EN60950

RF Specification													
Frequency Band	<p>802.11a 5.15 ~ 5.35GHz, 5.47 ~ 5.725GHz, 5.725~5.825GHz</p> <p>802.11b/g/n U.S., Europe and Japan product covering 2.400 to 2.484 GHz, programmable for different country regulations</p>												
Modulation Technology	<p>OFDM = BPSK, QPSK, 16-QAM, 64-QAM</p> <p>DSSS = DBPSK, DQPSK, CCK</p>												
Operating Channels	<p>802.11a US/Canada:12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz) Europe:19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz) Japan:4 non-overlapping channel (5.15~5.25GHz) China:5 non-overlapping channel (5.725~5.85GHz)</p> <p>802.11b/g 11 for North America, 14 for Japan, 13 for Europe</p>												
Receive Sensitivity (Typical)	<table border="1"> <tr> <td>802.11a -92dBm @ 6Mbps, -73dBm @ 54Mbps</td> <td>802.11g -94 dBm @ 6Mbps, -74 dBm @ 54Mbps</td> <td>802.11b -97 dBm @ 1Mbps -92 dBm @ 11Mbps</td> <td>802.11n -91 dBm @ MCS8 -74 dBm @ MCS15</td> </tr> </table>	802.11a -92dBm @ 6Mbps, -73dBm @ 54Mbps	802.11g -94 dBm @ 6Mbps, -74 dBm @ 54Mbps	802.11b -97 dBm @ 1Mbps -92 dBm @ 11Mbps	802.11n -91 dBm @ MCS8 -74 dBm @ MCS15								
802.11a -92dBm @ 6Mbps, -73dBm @ 54Mbps	802.11g -94 dBm @ 6Mbps, -74 dBm @ 54Mbps	802.11b -97 dBm @ 1Mbps -92 dBm @ 11Mbps	802.11n -91 dBm @ MCS8 -74 dBm @ MCS15										
Available transmit power	<p>Radio 1 (WLAN1)</p> <table border="1"> <thead> <tr> <th colspan="2">FCC</th> <th colspan="2">ETSI</th> </tr> <tr> <th>Frequency</th> <th>Power</th> <th>Frequency</th> <th>Power</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	FCC		ETSI		Frequency	Power	Frequency	Power				
FCC		ETSI											
Frequency	Power	Frequency	Power										

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

	5.150~5.350 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps	5.150~5.350 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps
	5.470~5.725 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps
	5.725~5.825 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps	5.725~5.825 GHz IEEE802.11a	28dBm@6~24Mbps 26dBm@36Mbps 24dBm@48Mbps 22dBm@54Mbps
	2.412~2.462 GHz IEEE802.11g	28dBm@6~24Mbps 26dBm@36Mbps 25dBm@48Mbps 24dBm@54Mbps	2.412~2.462 GHz IEEE802.11g	28dBm@6~24Mbps 26dBm@36Mbps 25dBm@48Mbps 24dBm@54Mbps
	2.412~2.462 GHz IEEE802.11b	28dBm@1~11Mbps	2.412~2.462 GHz IEEE802.11b	28dBm@1~11Mbps
Radio 2 (WLAN2)				
FCC		ETSI		
Frequency	Power	Frequency	Power	
2.412~2.462 GHz IEEE802.11g/n	19dBm@6~24Mbps 18dBm@36Mbps 17dBm@48Mbps 16dBm@54Mbps	2.412~2.472 GHz IEEE802.11g/n	19dBm@6~9Mbps 18dBm@12~18Mbps 17dBm@24~36Mbps 16dBm@48~54Mbps	
2.412~2.462 GHz IEEE802.11b	18dBm@1~11Mbps	2.412~2.472 GHz IEEE802.11b	18dBm@1~11Mbps	
Internal Antenna	1 x Simulated Omni Antenna (2.4GHz) for 802.11b/g/n			
External Antenna	2 x N type connector for 802.11a and 802.11b/g			

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

Software Features																																																																																										
General																																																																																										
Topology	Infrastructure																																																																																									
Protocol / Standard	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.11a (5GHz WLAN) IEEE 802.11b/g (2.4GHz WLAN) RFC 768 UDP RFC 791 IP RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 1058 RIP RFC 1305 NTP RFC 1541 / 2131 / 3046 DHCP client / Server RFC 2068 / 2616 HTTP RFC 2516 PPPoE RFC 2865,2866 RADIUS																																																																																									
Operation Mode	18 modes <table border="1" data-bbox="532 1197 1409 1608"> <thead> <tr> <th rowspan="2">EOR7550</th> <th colspan="8">Radio1(11a/b/g)</th> </tr> <tr> <th>AP (LAN/WAN)</th> <th>CB (LAN/WAN)</th> <th>CR (LAN)</th> <th>WDS Bridge (LAN)</th> <th>WDS Repeater (LAN/WAN)</th> <th>UR(AP)</th> <th>UR(STA)</th> <th>Disable</th> </tr> </thead> <tbody> <tr> <td>AP</td> <td>○ (LAN/WAN)</td> <td>○ (LAN/WAN)</td> <td>○ (LAN)</td> <td>○ (LAN)</td> <td>○ (LAN/WAN)</td> <td>X</td> <td>X</td> <td>○ (LAN/WAN)</td> </tr> <tr> <td>CB</td> <td>○ (LAN/WAN)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN/WAN)</td> </tr> <tr> <td>CR</td> <td>○ (LAN)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN)</td> </tr> <tr> <td>WDS Bridge</td> <td>○ (LAN)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN)</td> </tr> <tr> <td>WDS Repeater</td> <td>○ (LAN/WAN)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN/WAN)</td> </tr> <tr> <td>UR(AP)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN/WAN)</td> <td>X</td> </tr> <tr> <td>UR(STA)</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>○ (LAN/WAN)</td> <td>X</td> <td>X</td> </tr> <tr> <td>Disable</td> <td>○ (LAN/WAN)</td> <td>○ (LAN/WAN)</td> <td>○ (LAN)</td> <td>○ (LAN)</td> <td>○ (LAN/WAN)</td> <td>X</td> <td>X</td> <td>X</td> </tr> </tbody> </table>	EOR7550	Radio1(11a/b/g)								AP (LAN/WAN)	CB (LAN/WAN)	CR (LAN)	WDS Bridge (LAN)	WDS Repeater (LAN/WAN)	UR(AP)	UR(STA)	Disable	AP	○ (LAN/WAN)	○ (LAN/WAN)	○ (LAN)	○ (LAN)	○ (LAN/WAN)	X	X	○ (LAN/WAN)	CB	○ (LAN/WAN)	X	X	X	X	X	X	○ (LAN/WAN)	CR	○ (LAN)	X	X	X	X	X	X	○ (LAN)	WDS Bridge	○ (LAN)	X	X	X	X	X	X	○ (LAN)	WDS Repeater	○ (LAN/WAN)	X	X	X	X	X	X	○ (LAN/WAN)	UR(AP)	X	X	X	X	X	X	○ (LAN/WAN)	X	UR(STA)	X	X	X	X	X	○ (LAN/WAN)	X	X	Disable	○ (LAN/WAN)	○ (LAN/WAN)	○ (LAN)	○ (LAN)	○ (LAN/WAN)	X	X	X
EOR7550	Radio1(11a/b/g)																																																																																									
	AP (LAN/WAN)	CB (LAN/WAN)	CR (LAN)	WDS Bridge (LAN)	WDS Repeater (LAN/WAN)	UR(AP)	UR(STA)	Disable																																																																																		
AP	○ (LAN/WAN)	○ (LAN/WAN)	○ (LAN)	○ (LAN)	○ (LAN/WAN)	X	X	○ (LAN/WAN)																																																																																		
CB	○ (LAN/WAN)	X	X	X	X	X	X	○ (LAN/WAN)																																																																																		
CR	○ (LAN)	X	X	X	X	X	X	○ (LAN)																																																																																		
WDS Bridge	○ (LAN)	X	X	X	X	X	X	○ (LAN)																																																																																		
WDS Repeater	○ (LAN/WAN)	X	X	X	X	X	X	○ (LAN/WAN)																																																																																		
UR(AP)	X	X	X	X	X	X	○ (LAN/WAN)	X																																																																																		
UR(STA)	X	X	X	X	X	○ (LAN/WAN)	X	X																																																																																		
Disable	○ (LAN/WAN)	○ (LAN/WAN)	○ (LAN)	○ (LAN)	○ (LAN/WAN)	X	X	X																																																																																		

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

LAN	DHCP Server DHCP Client																																																																																									
Wireless	<p>- Auto Channel Selection (Setting varies by Regular Domains)</p> <p>- Transmission Rate</p> <p>11 a/b/g : 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps</p> <p>11n :</p> <table border="1"> <thead> <tr> <th rowspan="2">MCS Index</th> <th colspan="2">Guard Interval 800ns</th> <th colspan="2">Guard Interval 400ns</th> </tr> <tr> <th>20 MHz</th> <th>40 MHz</th> <th>20 MHz</th> <th>40 MHz</th> </tr> </thead> <tbody> <tr><td>0</td><td>6.5</td><td>13.5</td><td>7.2</td><td>15</td></tr> <tr><td>1</td><td>13</td><td>27</td><td>14.4</td><td>30</td></tr> <tr><td>2</td><td>19.5</td><td>40.5</td><td>21.7</td><td>45</td></tr> <tr><td>3</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>4</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>5</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>6</td><td>58.5</td><td>121.5</td><td>65</td><td>135</td></tr> <tr><td>7</td><td>65</td><td>135</td><td>72.2</td><td>157.5</td></tr> <tr><td>8</td><td>13</td><td>27</td><td>14.4</td><td>30</td></tr> <tr><td>9</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>10</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>11</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>12</td><td>78</td><td>162</td><td>86.7</td><td>180</td></tr> <tr><td>13</td><td>104</td><td>216</td><td>115.6</td><td>240</td></tr> <tr><td>14</td><td>117</td><td>243</td><td>130</td><td>270</td></tr> <tr><td>15</td><td>130</td><td>270</td><td>144.4</td><td>300</td></tr> </tbody> </table> <p>- Distance Control (802.1x Ack timeout) for Radio2</p>	MCS Index	Guard Interval 800ns		Guard Interval 400ns		20 MHz	40 MHz	20 MHz	40 MHz	0	6.5	13.5	7.2	15	1	13	27	14.4	30	2	19.5	40.5	21.7	45	3	26	54	28.9	60	4	39	81	43.3	90	5	52	108	57.8	120	6	58.5	121.5	65	135	7	65	135	72.2	157.5	8	13	27	14.4	30	9	26	54	28.9	60	10	39	81	43.3	90	11	52	108	57.8	120	12	78	162	86.7	180	13	104	216	115.6	240	14	117	243	130	270	15	130	270	144.4	300
MCS Index	Guard Interval 800ns		Guard Interval 400ns																																																																																							
	20 MHz	40 MHz	20 MHz	40 MHz																																																																																						
0	6.5	13.5	7.2	15																																																																																						
1	13	27	14.4	30																																																																																						
2	19.5	40.5	21.7	45																																																																																						
3	26	54	28.9	60																																																																																						
4	39	81	43.3	90																																																																																						
5	52	108	57.8	120																																																																																						
6	58.5	121.5	65	135																																																																																						
7	65	135	72.2	157.5																																																																																						
8	13	27	14.4	30																																																																																						
9	26	54	28.9	60																																																																																						
10	39	81	43.3	90																																																																																						
11	52	108	57.8	120																																																																																						
12	78	162	86.7	180																																																																																						
13	104	216	115.6	240																																																																																						
14	117	243	130	270																																																																																						
15	130	270	144.4	300																																																																																						

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

	<ul style="list-style-type: none"> - Signal Strength indication using LEDs - Bandwidth Selection
Security	Authentication: <ul style="list-style-type: none"> - 802.11i (WPA, WPA2) - 802.1x (including EAP-TLS/TTLS) IEEE 802.1x Supplicant support in CB mode Encryption: Open, WEP-64/128, TKIP, AES MAC address access control list MSSID Support in client access mode Hide SSID in beacons User isolation MAC address Filtering NAT in Client Router mode Multiple SSID (4 SSID)
QoS	WMM
Management	
Configuration	Web-based configuration (HTTP)/Telnet
Firmware Upgrade	Upgrade firmware via web browser Fix latest setting parameter when firmware upgrading
Administrator Setting	Administrator password can be changed
System monitoring	Status in hand , useful statistic and Event log
Reset Setting	Reset to factory default and reboot
MIB	MIB I , MIB II(RFC1213) and Private MIB
SNMP	V1 , V2c
Backup	Save all setting and condition to a file by web

Environment & Mechanical

Temperature Range	Operating -20°C~70°C Storage -30°C to 80°C
Humidity (non-condensing)	0% ~ 95% typical
Dimensions	260mm (L) x 175mm (W) x 65mm (H)

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



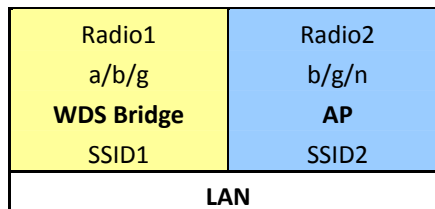
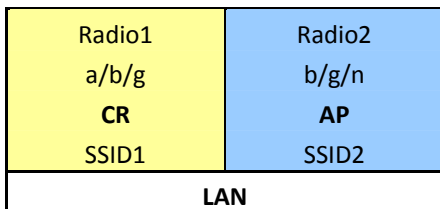
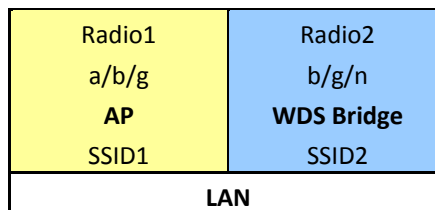
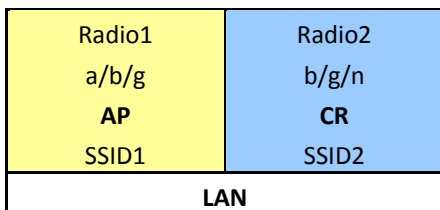
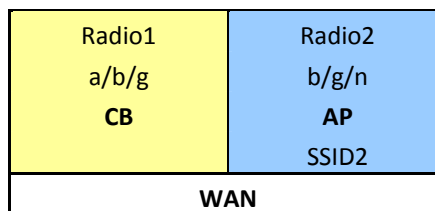
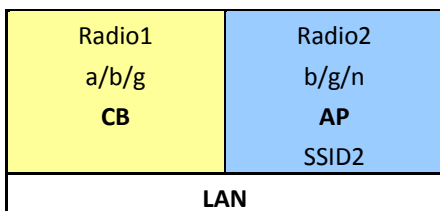
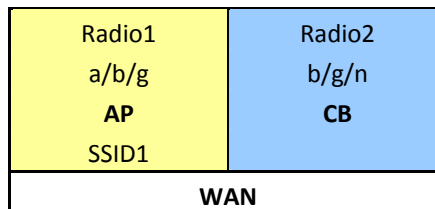
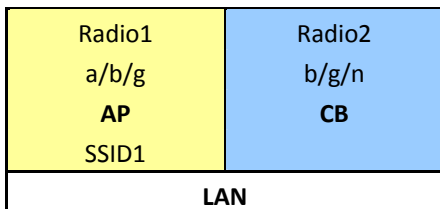
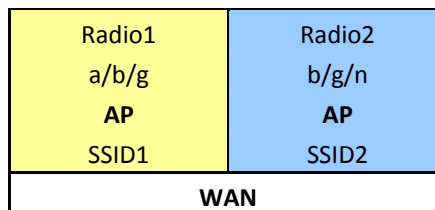
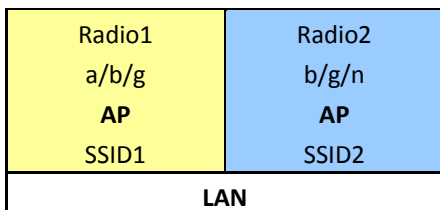
EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

Weight	600g
--------	------

Application 18 Modes



* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

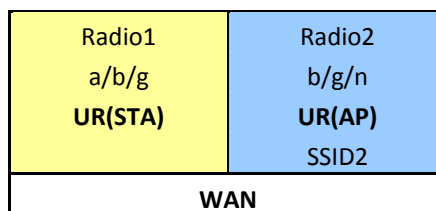
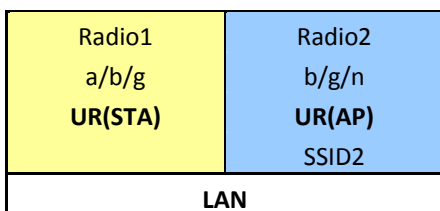
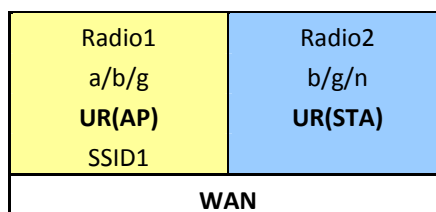
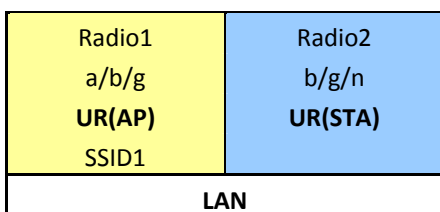
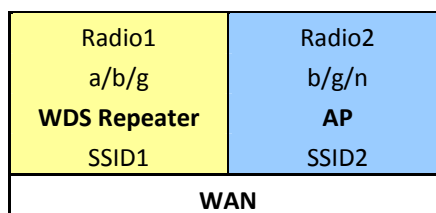
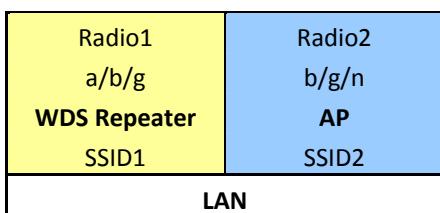
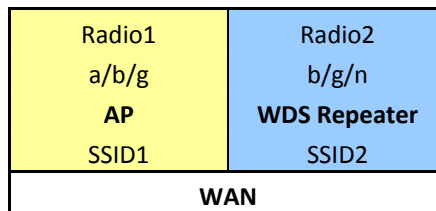
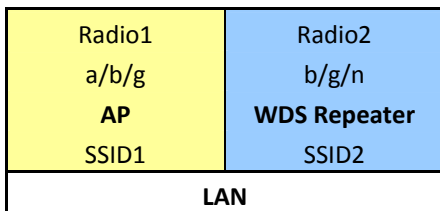
** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------



4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.



EOR7550

Dual Radio Multi-Function Repeater

2.4 GHz/ 5.0 GHz	802.11a/b/g/n	300 Mbps	Multi-Function
------------------	---------------	----------	----------------

V1.4

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.