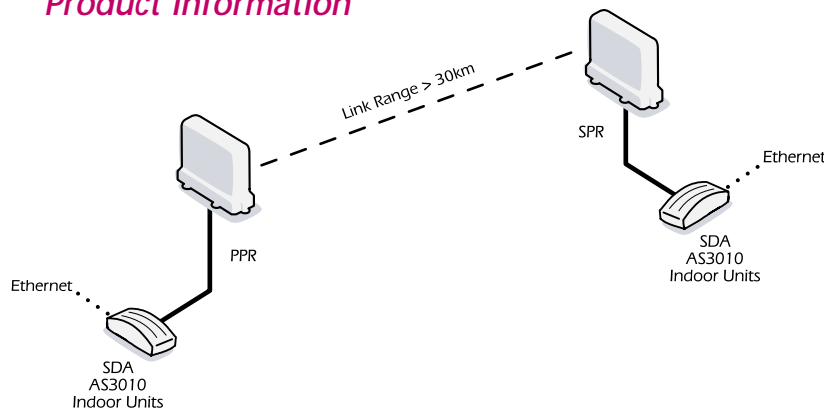




Airspan's AS3010 is a low cost, high performance broadband wireless system designed to provide a secure and reliable environment for Point-to-Point (PtP) applications. Each AS3010 link is capable of carrying up to 4Mbps using a 1.33MHz channel and is fully Internet Protocol (IP) centric. Two or more links can be used in parallel in order to provide increased link capacity. AS3010 benefits from real-time adaptive modulation (2-, 4-, 8-level FSK) and Auto Retransmission Request (ARQ); features that offer high quality connectivity whilst maximising spectrum utilisation. Today AS3010 is available in both unlicensed bands (900MHz, 2.4GHz, and in 5.7-5.8GHz) and licensed bands (2.5GHz, 2.7-2.9GHz and 3.3-3.8GHz).

## Product Information



## Overview

Airspan's AS3010 is a reliable point-to-point networking solution for operators, enterprises and government organisations. It provides a cost effective alternative to costly wireline solutions and leased lines.

The AS3010 kit provides an all-in-a-box solution, which contains everything needed for easily and quickly deploying a point-to-point link. The kit includes two AS3010 outdoor terminal radios, two indoor data adaptors and Cat 5 cables. The AS3010 terminal radio can either be used with in-built 23°, 15/18dBi gain antenna or can be used with an external antenna.

Each AS3010 link provides up to 4Mbps bandwidth. If more than 4 Mbps bandwidth is required between two end points then it is possible to install two or more links in parallel in order to increase the available link capacity. Since the AS 3010 data adaptors provide industry standard 10BaseT Ethernet interfaces at both ends, deployment of multiple links is

achieved very easily. Optionally, AS3010 can be used to transport T1 or fractional E1 by using external TDMoIP gateways.

AS3010 is managed by an SNMP based management system, which runs under standard Microsoft Windows platform. The management system provides a comprehensive range of management functions including trap management, configuration control, remote performance monitoring and remote software download.

## Applications

- LAN to LAN bridging for enterprise
- Building to building enterprise networking
- Backhaul for ISP/ASP/WISP
- Backhauling AS WipLL base stations
- Backhaul of 802.11b hotspots
- CCTV surveillance and telemetry
- Transparent LAN services
- Business park networking
- Campus networking

## Key Features

(Benefits)

- Frequency Bands supported:
  - 900 MHz
  - 2.4 GHz
  - 2.5 GHz
  - 2.7 - 2.9 GHz
  - 3.3 - 3.8 GHz
  - 5.725 - 5.850 GHz
- Easy to deploy
- Complete, all-in-a-box solution
- Low cost
- Packet based air interface
- 4Mbps (3.2Mbps net) bandwidth per link
- Built-in 10BaseT Ethernet interfaces
- Integrated support of bridging and routing functionality
- 802.1Q/p VLAN support



*Leading the World in Wireless DSL*



# AS3010 Technical Specification

	Unlicensed Bands	Licensed Bands
<b>Radio Technology</b>		
Frequency Bands:	900: 902-928 MHz 2.4: 2,400-2,500 MHz 5.8: 5,725-5,875 MHz	MDS: 2,500-2,686 MHz 2.8: 2,700-2,900 MHz 3.X: 3,300-3,800 MHz
Duplex Mode:	TDD for all bands	3.X: FDD/TDD Others: TDD
Radio Technology:	FH-CDMA	FH-CDMA
Multiple Access Method:	PPMA	PPMA
Output Power:	27 dBm* (30dBm for 900Mhz)* *where allowed by regulation	27 dBm* *where allowed by regulation
Antenna Type:	PPR Internal 8/15/18 dBi, External	SPR Internal 8/15/18 dBi, External
Sub-Channel Spacing:	1 MHz	1 MHz
Modulation:	Multilevel (2, 4 or 8) CPFSK	Multilevel (2, 4 or 8) CPFSK
Receiver Sensitivity: (typical) (BER 1E-6 @ 2/4/8 FSK)	-90/ - 83/ -75 dBm (-92/ - 85/ -78 dBm for 900 Mhz)	-90/ - 83/ -75 dBm
Throughput:	Up to 4 Mbps per PPR or SPR	Up to 4 Mbps per PPR or SPR
Link Range:	Exceeds 30km depending on frequency band, antenna gain and local regulations	
Radio Standards Compliance:	ETSI EN 300 328-1, ETSI EN 301 253	FCC part 15, RSS139, Telec
EMC:	ETSI ETS 300 826, ETSI EN 300 385, ETSI EN 300 386-2, ETSI ETS 300 132-2 FCC part 15	

<b>Networking</b>	
Protocols:	IP Routing & PPPoE Bridging, Transparent Bridging, 802.1Q/p, DHCP relay
QoS:	Based on 802.1p, DiffServ/TOS, IP addresses, protocols or applications
Security:	Authentication, Encryption, de-facto VPNs (802.1Q) and IP filters based on IP addresses, protocols or applications
Service Classes:	CIR, MIR
RFC's:	768, 783, 791, 792, 826, 894, 903, 950, 1009, 1027, 1042, 1157, 1213, 1284, 1350, 1878

<b>Management</b>	
Management Tools:	WipMange - GUI based Element Manager, Data Base (ODBC)
Remote Management:	SNMP, Standard and Private MIBs
Local Management:	RS-232 (including Personal Digital Assistant - PDA) or SNMP
Software Upgrade:	Local or remote via TFTP, online, WipAD - Automatic Download
Auto Connect:	Auto seek and connect to base station with no CPE software configuration required
Spectrum Analyser:	PC based utility for spectrum analysis

<b>Mechanical and Electrical Specification</b>		
PPR + SDA	Outdoor Unit (PPR)	Indoor Unit (SDR)
Interfaces:	DB15, 10 BaseT N type Female (optional)	DB15, 10 BaseT 1 RJ-45 10 BaseT (SDA-1), 4 RJ-45 10 BaseT (SDA-4S/SDA-4H)
Power Requirements:		
Power Consumption:	12 W Max	25 W Max. (incl. SPR)
Voltage:	30-55 VDC	90-264 VAC, 50/60 Hz
Dimensions H/W/D (mm):	317 x 400 x 65.5	200 x 150 x 40
Weight:	4.7 Kg	0.47 Kg (SDA-1), 0.53 Kg (SDA-4S/SDA-4H)

SPR + SDA	Outdoor Unit (SPR)	Indoor Unit (SDA)
Interfaces:	DB15, 10 BaseT N type Female (optional)	DB15, 10 BaseT 1 RJ-45 10 BaseT (SDA-1), 4 RJ-45 10 BaseT (SDA-4S/SDA-4H)
Power Requirements:		
Power Consumption:	12 W Max	25 W Max. (incl. SPR)
Voltage:	30-55 VDC	90-264 VAC, 50/60 Hz
Dimensions H/W/D (mm):	317 x 400 x 65.5	200 x 150 x 40
Weight:	4.7 Kg	0.47 Kg (SDA-1), 0.53 Kg (SDA-4S/SDA-4H)

<b>Environmental</b>		
	Outdoor Unit	Indoor Unit
Operating Temperature:	-30°C to +60°C	0°C to +50°C

<b>Standards Compliance, General</b>	
Safety:	EN 60950, UL 1950
Environmental:	ETS 300 019



**Worldwide Headquarters;**  
**Airspan Networks Inc.**  
 777 Yamato Road, Suite 105,  
 Boca Raton, FL 33431-4408, USA  
 Tel: +1 561 893 8670 Fax: +1 561 893 8671

**Main Operations;**  
**Airspan Communications Limited**  
 Cambridge House, Oxford Road,  
 Uxbridge, Middlesex, UB8 1UN, UK  
 Tel: +44 (0) 1895 467 100 Fax: +44 (0) 1895 467 101