Dual Band (2.4 GHz, 5 GHz) Ethernet Bridge/Router

AirborneM2M™ Enterprise Series

PRODUCT FEATURES

- 10/100 Mbps to 802.11a/b/g/n (2.4 GHz, 5 GHz)
- Wide operating temperature range (-20°C to +85°C)
- Compact form factor
- AirborneM2M™ SpeedLink roaming provides enhanced connection reliability
- Advanced Enterprise Class wireless security (WPA2-Enterprise, WPA, WEP, EAP)
- Available in OEM version (without enclosure)
- Supported by Airborne Management Center (AMC) device discovery, management and control application software

AIRBORNEM2M™ DUAL BAND WIRELESS

The AirborneM2M™ line of enterprise wireless Ethernet Routers and Bridges are built for networking equipment in an array of machine to machine (M2M) applications. The small compact form factor, integrated options and ease of use make it ideal for commercial enterprise environments.

Dual-Band Wi-fi

The AirborneM2M™ products establish wireless connections over both 2.4 GHz and 5 GHz bands. Whenever the 2.4 GHz airspace is overcrowded with competing wireless transmission, AirborneM2M™ products can be switched over to 5 GHz band to keep data flowing.

Enterprise Class Security

Security protocols are important to mission-critical wireless M2M applications. AirborneM2M™ multi-layered security approach addresses the requirements of Enterprise-class networks and corporate IT departments. These advanced security features include wireless security (801.11i/WPA2 Enterprise); network security (EAP authentication and certificate support); communication security (SSH functionality and fully encrypted data tunnels); and device security (multi-level encryption capability to protect configuration data).

SpeedLink™ Roaming

The latest AirborneM2M™ SpeedLink™ roaming feature further enhances the high level of connection reliability. SpeedLink™ enables AirborneM2M™ devices to roam quickly and freely throughout a wireless network without loosing important data. If you're walking around a hospital or driving through a warehouse, SpeedLink™ ensures you stay connected.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
AirborneM2M™ Enterprise Series	
ABDN-ER-DP551	Dual Band 802.11a/b/g/n (2.4 GHz, 5 GHz) Ethernet bridge and router with WPA2-Enterprise, WPA, WEP, EAP Security. AC power supply.
ABDN-ER-DP551U	Dual Band 802.11a/b/g/n (2.5 GHz, 5 GHz) Ethernet bridge and router with WPA2-Enterprise, WPA, WEP, EAP Security. Dual USB port, power cable.
ABDN-ER-DP553	Dual Band 802.11a/b/g/n (2.4 GHz, 5 GHz) Ethernet bridge and router OEM Version (open board, without enclosure)

World-wide.
Check with your local distributor for availability and options.

AIRBORNEM2M™ ENTERPRISE MODELS OPERATE IN A WIDE-RANGE OF COMMERCIAL APPLICATIONS:

Medical Devices
Retail / Point of Sale
Material Handling & Logistics
Test & Measurement
Security & Access control

Dual Band (2.4 GHz, 5 GHz) Ethernet Bridge/Router

AirborneM2M™ Enterprise Series

SPECIFICATIONS

TECHNOLOGY

Technology	IEEE 802.11a/b/g/n, Wi-Fi compliant
Wired Interface	10/100 Ethernet port (Bridge, Router (NAT3) Modes)
Frequency	2.4 ~ 2.4835 GHz (US/Canada/Europe) 5.150 ~ 5.350 GHz 5.725 ~ 5.825 GHz
Modulation Technology	DSSS, CCK, OFDM
Modulation Type	DBPSK, DQPSK, CCK, BPSK, QPSK, 16QAM, 64QAM
Network Access Modes	Infrastructure (Client), Ad Hoc
Channels	US/Canada: 11 Channels 802.11b/g 13 Channels 802.11a Europe: 13 Channels 802.11b/g 19 Channels 802.11a France: 4 Channels 802.11b/g
Wireless Data Rate	802.11b = 11, 5.5, 2, 1 Mbps 802.11a/g = 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n = 65, 58.5, 42, 39, 26, 19.5, 13, 6.5 Mbps
MAC	CSMA/CA with ACK, RTS, CTS
Network Protocols	TCP/IP, ARP, ICMP, DHCP, DHS, UDAP, TFTP, UDP, PING
Receive Sensitivity 802.11 b/g	54Mb/s = -72 dBm 36Mb/s = -78 dBm 18Mb/s = -84 dBm 6Mb/s = -89 dBm 11Mb/s = -86 dBm 1Mb/s = -92 dBm
Receive Sensitivity 802.11 a	54Mb/s = -74 dBm 36Mb/s = -80 dBm 18Mb/s = -86 dBm 6Mb/s = -90 dBm
Dimensions	63.4 x 99.0 x 46.7 mm (2.6 x 4.0 x 1.9 in)

FEATURES

Transmit Power	802.11b 15 dBm (31.6mW) 802.11g 12.6dBm (18.12mW) 802.11a 17 dBm (50.1mW)
Security Protocols	Disabled, WEP 64 & 128bit, WPA (TKIP), WPA (AES), WPA2 (AES), 802.1x (EAP) Supplicant 802.11I, WPA & WPA2 Enterprise supplicants (EAP-TLS, EAP-TTLS(MSCHAPv2), EAPTTLS (MDS5), EAP-PEAPv0 (MSCHAPv2, LEAP), EAP-FAST, LEAP) Supports Certificates and Private Key Upload and Storage (Multiple)
Antenna	Integrated RP-SMA Omni-directional 2dBi 2.4/5 GHz Antenna
Power Supply	5.0VDC+/-5%
Supply In-rush Current	3000mA (MAX) for 20ms
DC Characteristics	Operating Current (Tx, 802.11g) = 370mA Typ. Operating Current (Rx, 802.11g) = 200mA Typ.
Environmental	Operating Temperature: -20° to +85°C Storage Temperature: -20° to +85°C Relative humidity: 5% - 95% (non-condensing) Vibration: 20G peak-to-peak, 20Hz-2KHz swept Shock: 1500G peak-to-peak, 0.5mS duration
Interfaces	10/100 Ethernet
Enclosure	Nylon (Gray)
LED Indicators	3 indicator LEDs (Power, LINK, COMM)
Agency Approvals	North America: FCC Title 47 Part 15 Class B Sub C Intentional Radiator, IOC RSS210 Europe: CE ETSI EN300 328 RoHS & WEEE compliant

MECHANICAL DIAGRAM

Model ABDN-ER-DP553

Dimensions are in mm

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