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

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
- Power unit from AC or USB port
- 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

**Ordering Information**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABDN-ER-DP551</td>
<td>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.</td>
</tr>
<tr>
<td>ABDN-ER-DP551U</td>
<td>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.</td>
</tr>
<tr>
<td>ABDN-ER-DP553</td>
<td>Dual Band 802.11a/b/g/n (2.4 GHz, 5 GHz) Ethernet bridge and router OEM Version (open board, without enclosure)</td>
</tr>
<tr>
<td>ABDN-SE-DP551</td>
<td>Dual Band 802.11a/b/g/n (2.4 GHz, 5 GHz) serial server with WPA2-Enterprise, WPA, WEP, EAP Security. AC power supply.</td>
</tr>
</tbody>
</table>

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, Serial Server
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)**

**Serial**
- **RS-232/422 4-wire, RS-485 2-wire**

**Frequency**
- **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**

**Radio Characteristics**
- **MAC**: CSMA/CA with ACK, RTS, CTS

**Network Protocols**
- TCP/IP, ARP, ICMP, DHCP, DNS, UDP, 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 = -96 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) Suppliant 802.11i, WPA & WPA2
  - Enterprise supplicants (EAP-TLS, EAP-TTLS(MSCHAPv2), EAP-TTLS (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 (Rx, 802.11g) = 370mA Typ.
  - Operating Current (Rx, 802.11a) = 550mA Typ.
  - Operating Current (Tx, 802.11g) = 370mA Typ.
  - Operating Current (Tx, 802.11a) = 550mA 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 EN 300 328 V1.8.1 (2.4 GHz)
  - RoHS & WEEE compliant

**MECHANICAL DIAGRAM**

Model ABDN-ER-DP53
Dimensions are in mm