

Airborne Enterprise Wireless Device Server Serial to 802.11b/g Wireless LAN (external)

ABDG-SE-DP100 Enterprise Series



Highly integrated with extended operating temps

Airborne is a family of fully integrated 802.11 wireless LAN device server products designed to provide wireless LAN and Internet connectivity to transportation, medical, warehouse logistics, POS, industrial, military and scientific applications.

The highly integrated hardware and software enables plug-and-play capability. This significantly reduces the complexity of wireless system deployment and network connectivity. Integrating Airborne with existing OEM platforms can significantly enhance the product's value and functionality giving the OEM a competitive advantage.

Application

The Airborne Enterprise Wireless Device Server creates a connection between an 802.11 wireless LAN device with a serial port. The unit transparently conveys data between the device with RS-232, RS-422 or RS-485 interface and a wireless LAN. It opens up the world of remote device monitoring and management, enabling data loggers, medical and industrial monitors, data acquisition and control systems, programmable controllers and a host of other applications connectivity to the LAN or Internet.

For industrial grade yet low cost plug-and-play 802.11b/g wireless LAN connectivity, Airborne is in a class of its own. Its industrial grade design (extended operating temperatures and environmental specifications), advanced security standards such as WEP, WPA and LEAP, compact form factor and low power modes - as well as the five year warranty - give Airborne the reliability and performance demanded in a wide range of applications.

The Evaluation & Design Kit provides software and utilities that allow a developer to quickly and easily operate and evaluate the Wireless Device Server.

KEY FEATURES

- Extended operating temperature range (-40°C to +85°C) and environmental specifications
- Advanced security: WEP (64 & 128 bit), WPA and 802.1x (LEAP) authentication
- Low power modes
- Highly integrated 802.11b/g wireless module with radio, base-band & application processor
- Quick time to market & reduced development costs
- Software-configurable 802.11b interface
- Configurable serial, digital & analog I/O ports
- Integrated RTOS, TCP/IP Stack and CLI
- FCC Part 15 Class B Sub C Modular Approval
- Reduces need for RF and communications expertise
- Five year warranty

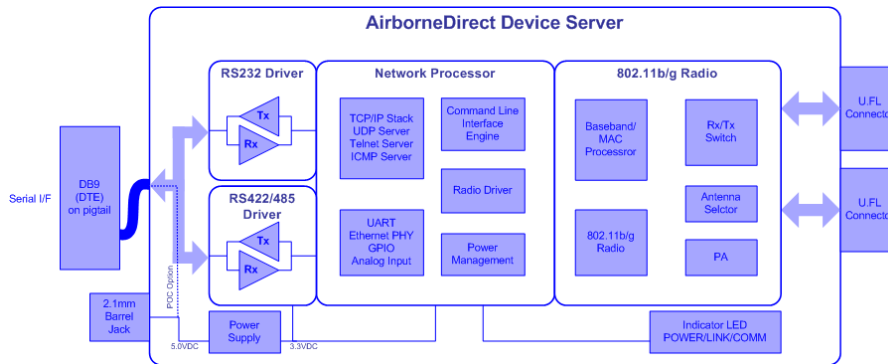
Model Selection Guide

| Model No. | Interface | | | WiFi | Security | | |
|---|-------------------------|------------|---------------------------|---------|-----------------------|-----|------|
| | RS-232 | RS-422/485 | POC (power over cable) | 802.11b | WEP (64 & 128 bit) | WPA | LEAP |
| ABDG-SE-DP101 | ● | ● | | ● | ● | ● | ● |
| ABDG-SE-DP104 | ● | | | ● | ● | ● | ● |
| ABDG-SE-DP107 | ● | | ● | ● | ● | ● | ● |
| To evaluate all available features and receive evaluation tools, order below. | | | | | | | |
| ABEG-SE-DP101 | Evaluation & Design Kit | | | | | | |
| ABEG-SE-DP102 | Evaluation & Design Kit | | | | | | |



All Quatech 802.11b/g products are RoHS compliant

Block Diagram



Package Contents

| Model No. | Package Includes: |
|---|---|
| ABDG-SE-DP101 ABDG-SE-DP104 ABDG-SE-DP107 <i>(DP107 does not include power supply)</i> | Airborne Enterprise Wireless Device Server Omni-directional Wand Antenna Power Supply Mounting Bracket |
| <u>Evaluation & Design Kit</u> ABEG-SE-DP101 ABEG-SE-DP102 | Airborne Enterprise Wireless Device Server Omni-directional Wand Antenna Power Supply Mounting Bracket 802.11b/g Compatible Access Point Hardware & Software Users Manual VCOM Driver and Configuration Utility Quick Start Guide Installation CD |

Specifications

| | |
|---------------------------------------|--|
| Serial Interface | RS-232, RS-422 or RS-485 (2 wire) |
| Wireless Network Interface | IEEE 802.11b/g, DSSS 802.11b/g, OFDM, WiFi Compliant |
| BAUD Rates | Up to 460.8 Kbps |
| Frequency | 2.4 ~ 2.4835 GHz (US, Europe, Canada, Japan) 2.471 ~ 2.497 GHz (Japan) |
| Channels | US/Canada: 11 channels (1 - 11) Europe: 13 channels (1 - 13) Japan: 14 channels (1 - 13 for g rates) (1 - 14 for b rates) France: 4 channels (10 - 13) |
| Wireless Raw Data Rates | 802.11b - 11, 5.5, 2, 1 Mbps 802.11g - 54, 48, 36, 24, 18, 12, 9, 6 Mbps |
| RF Power | +18dBm (typical) |
| Security | WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP |
| Antenna | Integrated Omni-directional RP-SMA +3dBi antenna |
| Protocols | TCP/IP, ARP, ICMP, DHCP, DNS, HTTP, UDAP Discovery, UDP |
| Data Transfer Protocols | TCP/IP, HTTP |
| Status Indicators | Power, Link, Comm |
| Power Input | 110/240VAC to 5VDC external power supply (wall wart) |
| Power Consumption | 2.5W max (AC Adapter) |
| Power Supply Connector | 2.1mm Barrel Jack |
| Software Configuration | Command Line Interface |
| Management | Device Discovery, Configuration and Remote Firmware Upgrade |
| Agency Approvals | U.S. = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210 RoHS & WEEE Compliant |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +125°C |
| Dimensions (without mounting bracket) | 99.78mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.) |
| Enclosure | Nylon - Gray |

Mechanical Outline

