



# AirborneDirect™ Wireless Bridge Ethernet to Wireless LAN (external)

ABDB-ET-DP100 series
ABDB-ET-DP500 Enterprise series



### Highly integrated, plug and play

AirborneDirect™ is a family of fully integrated 802.11 wireless LAN bridge 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 AirborneDirect™ with existing OEM platforms can significantly enhance the product's value and functionality giving the OEM a competitive advantage.

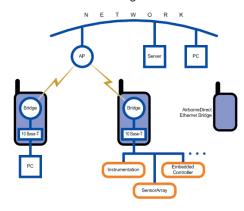
## **Application**

The AirborneDirect™ Ethernet Bridge creates a connection between an 802.11b wireless LAN device with a Ethernet port. The Bridge transparently conveys data between the device with a 10 BaseT interface and a wireless LAN. The Bridge opens up the world of remote device monitoring and management,

enabling many applications the ability to connect to the LAN or Internet. For example:

- data loggers
- medical and industrial monitors
- data acquisition and control systems
- programmable controllers

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



## **KEY FEATURES**

- Extended operating temperatures (-40° to +85°C) and environmental specifications
- Advanced security: WEP (64 & 128 bit), WPA and 802.1x (LEAP) authentication
- Plug-and-Play LAN and Internet Connectivity
- Compact Package Outline
- Integrated External Antenna
- Integrated Ethernet Cable and RJ-45 (Male) Connector
- Software-Configurable 802.11b Interface
- Advanced utilities for discovery, configuration and management of AirborneDirect<sup>™</sup> Ethernet device
- North American and European regulatory approvals (FCC, CE, IOC)
- 5 year warranty

#### **Model Selection Guide**

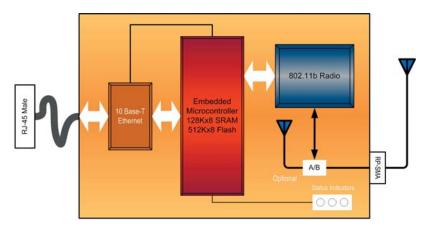
	Interface	WiFi	Security		
Model No.	10 Base-T Ethernet	802.11b	WEP (64 & 128 bit)	WPA	LEAP*
ABDB-ET-DP101	•	•	•	•	
ABDB-ET-DP501	•	•	•	•	•
To evaluate all available features and receive evaluation tools, order below.					
ABEB-ET-DP101	Evaluation & Design Kit, includes Wireless Access Point				
ABEB-ET-DP102	Evaluation & Design Kit, does not include Wireless Access Point				



For RoHS-compliant 802.11b products, add "-G" at end of model number.

\* Web server not present with LEAP

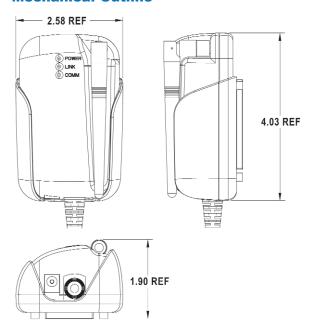
## **Block Diagram**



## **Package Contents**

Model No.	Package Includes:	
ABDB-ET-DP101 ABDB-ET-DP501	AirborneDirect™ Ethernet Bridge Omni-directional Wand Antenna Power Supply Mounting Bracket	
Evaluation & Design Kit ABEB-ET-DP101 ABEB-ET-DP102 (does not include Access Point)	AirborneDirect™ Ethernet Bridge Omni-directional Wand Antenna Power Supply Mounting Bracket 802.11b Compatible Access Point Hardware & Software Users Manual Quick Start Guide Installation CD	

# **Mechanical Outline**



# **Specifications**

Wireless Network Interface IEEE 802.11b DSSS, WiFi Compliant  Frequency 2.4 ~ 2.4835 GHz (US, Europe, Canada, Japan) 2.471 ~ 2.497 GHz (Japan)  Channels 11 US/Canada 13 Europe 14 Japan 4 France  Wireless Raw Data Rates 11Mbps, 5.5Mbps, 2Mbps, 1Mbps  RF Power +18dBi (typical)  Security WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP		
Frequency  2.4 ~ 2.4835 GHz (US, Europe, Canada, Japan) 2.471 ~ 2.497 GHz (Japan)  Channels  11 US/Canada 13 Europe 14 Japan 4 France  Wireless Raw Data Rates  11Mbps, 5.5Mbps, 2Mbps, 1Mbps  RF Power  +18dBi (typical)  Security  WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP  Antenna  Integrated Omni-directional RP-SMA +3dBi antenna  Status Indicators  Power, Link, Comm  Power Input  110/240VAC to 5VDC external power supply (wall wart)  Power Consumption  2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector  2.1 mm Barrel Jack  Software Configuration  Web page based configuration interface  Management  Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Ethernet Interface	10 Base-T, RJ-45 Male with pigtail, 10Mbps
2.471 ~ 2.497 GHz (Japan)  Channels  11 US/Canada 13 Europe 14 Japan 4 France  Wireless Raw Data Rates  11Mbps, 5.5Mbps, 2Mbps, 1Mbps  RF Power  +18dBi (typical)  Security  WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP  Antenna  Integrated Omni-directional RP-SMA +3dBi antenna  Status Indicators  Power Link, Comm  Power Input  110/240VAC to 5VDC external power supply (wall wart)  Power Consumption  2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector  2.1 mm Barrel Jack  Software Configuration  Web page based configuration interface  Management  Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Wireless Network Interface	IEEE 802.11b DSSS, WiFi Compliant
13 Europe 14 Japan 4 France  Wireless Raw Data Rates 11Mbps, 5.5Mbps, 2Mbps, 1Mbps  RF Power +18dBi (typical)  Security WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP  Antenna Integrated Omni-directional RP-SMA +3dBi antenna  Status Indicators Power, Link, Comm  Power Input 110/240VAC to 5VDC external power supply (wall wart)  Power Consumption 2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector Software Configuration Web page based configuration interface  Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Frequency	2.4 ~ 2.4835 GHz (US, Europe, Canada, Japan) 2.471 ~ 2.497 GHz (Japan)
RF Power +18dBi (typical)  Security WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP  Antenna Integrated Omni-directional RP-SMA +3dBi antenna Status Indicators Power, Link, Comm  Power Input 110/240VAC to 5VDC external power supply (wall wart)  Power Consumption 2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector 2.1 mm Barrel Jack  Software Configuration Web page based configuration interface  Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Channels	13 Europe 14 Japan
Security  WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP  Antenna  Integrated Omni-directional RP-SMA +3dBi antenna Status Indicators  Power, Link, Comm  Power Input  110/240VAC to 5VDC external power supply (wall wart)  Power Consumption  2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector  2.1 mm Barrel Jack  Software Configuration  Web page based configuration interface  Management  Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Wireless Raw Data Rates	11Mbps, 5.5Mbps, 2Mbps, 1Mbps
Antenna Integrated Omni-directional RP-SMA +3dBi antenna Status Indicators Power, Link, Comm  Power Input 110/240VAC to 5VDC external power supply (wall wart)  Power Consumption 2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector 2.1 mm Barrel Jack  Software Configuration Web page based configuration interface  Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	RF Power	+18dBi (typical)
Status Indicators Power, Link, Comm  Power Input 110/240VAC to 5VDC external power supply (wall wart)  Power Consumption 2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector 2.1 mm Barrel Jack  Software Configuration Web page based configuration interface  Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Security	WEP (64 & 128 bit), WPA (PSK & TKIP), WPA with LEAP
Power Input    110/240VAC to 5VDC external power supply (wall wart)   Power Consumption   2.5W @ 5.0VDC (AC Adapter)   Power Supply Connector   2.1 mm Barrel Jack     Software Configuration   Web page based configuration interface     Management   Device Discovery, Configuration and Remote Firmware Upgrade     OS Compatibility   Win9x/ME/NT/2000/XP     Agency Approvals   US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210     Operating Temperature   -40°C to +85°C     Storage Temperature   -40°C to +125°C     Dimensions (without mounting bracket)   99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Antenna	Integrated Omni-directional RP-SMA +3dBi antenna
(wall wart)  Power Consumption 2.5W @ 5.0VDC (AC Adapter)  Power Supply Connector 2.1 mm Barrel Jack  Software Configuration Web page based configuration interface  Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Status Indicators	Power, Link, Comm
Power Supply Connector  2.1 mm Barrel Jack  Software Configuration  Web page based configuration interface  Management  Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Power Input	
Software Configuration  Management  Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Power Consumption	2.5W @ 5.0VDC (AC Adapter)
Management Device Discovery, Configuration and Remote Firmware Upgrade  OS Compatibility Win9x/ME/NT/2000/XP  Agency Approvals US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Power Supply Connector	2.1 mm Barrel Jack
Firmware Upgrade  OS Compatibility  Win9x/ME/NT/2000/XP  Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Software Configuration	Web page based configuration interface
Agency Approvals  US = FCC Part 15 Class B, C/UL, CE Europe = CE Canada = RSS-210  Operating Temperature  -40°C to +85°C  Storage Temperature  -40°C to +125°C  Dimensions (without mounting bracket)  99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Management	
Europe = CE Canada = RSS-210  Operating Temperature -40°C to +85°C  Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	OS Compatibility	Win9x/ME/NT/2000/XP
Storage Temperature -40°C to +125°C  Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Agency Approvals	Europe = CE
Dimensions (without mounting bracket) 99.8mm L x 60.5mm W x 36.1mm T (3.93 in. x 2.38 in. x 1.42 in.)	Operating Temperature	-40°C to +85°C
(without mounting bracket) (3.93 in. x 2.38 in. x 1.42 in.)	Storage Temperature	-40°C to +125°C
Enclosure Nylon - Gray	2	
	Enclosure	Nylon - Gray



Quatech, Inc. High Performance Device Networking and Connectivity
5675 Hudson Industrial Parkway, Hudson, OH 44236 Tel 800.553.1170 Fax 330.655.9070 www.quatech.com