## Dual Band (2.4 GHz, 5 GHz) Wi-Fi Ethernet Bridge/Router, Serial Server

AirborneM2M™ Industrial BB-ABDN-xx-IN5xx0 series



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#### **PRODUCT FEATURES**

- RS-232/422/485 or 10/100 Mbps Ethernet to 802.11a/b/g/n (2.4, 5 GHz)
- Advanced Enterprise class wireless security
- One or two serial ports, one Ethernet port
- Wide operating temperature: -40 to +85 °C
- 5 to 36 VDC power required, sold separately. Power input via terminal block or DC jack

AirborneM2M™ Industrial Ethernet Bridge/Router and Wireless Device Serial Servers are built for networking equipment in a wide array of machine-to-machine (M2M) applications. AirborneM2M series features industrial strength packaging and supports a wide temperature rating (-40 to +85 °C) to withstand challenging M2M environments. Available in both single and dual serial port models or a single Ethernet port model.

These 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.

#### **Powering Options**

\_External 5-36 VDC power source required. USA power cord included, other cords sold separately.

#### **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION	<b>PoE</b> Power-over-Ethernet
BB-ABDN-ER-IN5010	Ethernet Bridge/Router – Industrial Wireless, Dual Band (2.4 / 5 GHz)	no
BB-ABDN-SE-IN5410	Serial Device Server – Industrial Wireless, Dual Band (2.4 / 5 GHz) - with one RS-232/422/485 port	no
BB-ABDN-SE-IN5420	Serial Device Server – Industrial Wireless, Dual Band (2.4 / 5 GHz) - with two RS-232/422/485 ports	no

Available in: North America, European Union (EU), Japan

**ACCESSORIES - sold separately** 

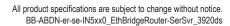
BB-MDR-20-24 - Power supply, 24VDC, 120-240 VAC, 50/60 Hz, 1.0A DIN rail

BB-PS-WDS – Power supply, 5VDC, 120-240 VAC, 50/60 Hz, 3A, 15W, barrel connector (Note: includes USA cord; other cords sold separately.)

BB-DRAD35 – 35mm DIN rail adapter kit (pair of 2)

BB-ACH2-AT-DP003-G - Antenna replacement, Wi-Fi 2.4/5GHz, 3.8/5.5dBi, RP-SMA

BB-TBKT7 - Terminal block replacement, 2-position, 3.5mm, screw, Euro RA, plug





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### **SPECIFICATIONS**

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TECHNOLOGY			
Wireless Technology	IEEE 802.11 a/b/g/n, Wi-Fi Compliant		
Wired Interface	2 ports, RS-232/422/485, (RS-232/422 4- wire or RS-485 2 wire) 10/100 Ethernet port (Bridge, Router (NAT3) Modes) Software selectable		
Frequency	2.4~2.4835 GHz (US/Canada/Europe) 2.4~2.497 GHz (Japan) 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		
	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	
	Japan:	14 Channels 802.11b	
		13 Channels 802.11g	
		23 Channels 802.11a	
Wireless Data Rates	802.11a/g = 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11b = 11, 5.5, 2, 1 Mbps 802.11n = 65, 58.5, 42, 39, 26, 19.5, 13, 6.5 Mbps		
Network Protocols	TCP/IP, ARP, ICMP, DHCP, DHS, UDAP, TFTP, UDP, PING, HTTP, FTP		
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 6Mb/s = -90 dBm		
Wireless Security	- Open, WEP 64 & 128 bit, WPA-PSK (TKIP), WPA2-PSK (AES), 802.1x (EAP), WPA-Enterprise, WPA2-Enterprise, EAP-TLS/MSCHAPv2, EAP-TTLS/MSCHAPv2, EAP-TTLS (MD5), EAP-PEAPv0/MSCHAPv2, LEAP - Zero host security footprint - Advanced certificate storage and management		
Secure Communications	SSH and SSL tunneling. Encrypted configuration.		
Transmit Power	802.11b = 15 dBm (31.6mW) 802.11g = 12.6dBm (18.12mW) 802.11a = 17 dBm (50.1mW)		