Manuals+ — User Manuals Simplified.

B B SMARTWORX ABDN-SE-DP553 Wireless Serial Adapter User Guide

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B B SMARTWORX ABDN-SE-DP553 Wireless Serial Adapter

Product Overview
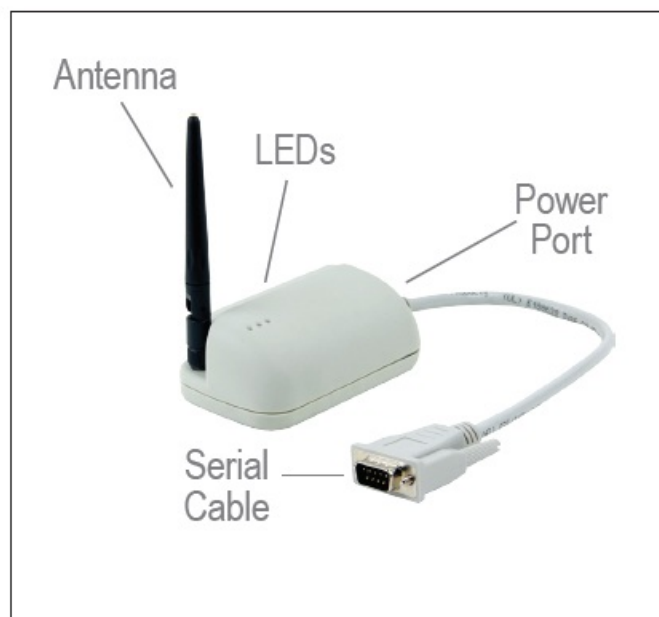
Setup.

- Connect the Antenna to the antenna connector located on top of the device.
- Plug the barrel connector of the AC power supply into the power port. Plug the power supply into an AC outlet.
- The ABDN-SE-DP551/553 does not have an Ethernet port for initial configuration. You will use a serial port.
- Connect one end of a null modem cable to the serial port of the ABDN-SE-DP551/553. Connect the other end of the null modem cable to the host computer using a built-in serial port or a serial port adapter.

Initial Connection.

Open HyperTerminal or a similar program on the Host computer. Settings: 9600, 8-N-1.
Type: ÿ~ABD

HOLD down the <ALT> key on your keyboard while typing 0255 on the keypad. Release. Immediately after the ÿ character, type ~ABD

If you are having trouble sending this sequence, please copy and paste ÿ~ABD into a text file and use the "Send Text File" option.

- If sent correctly, the device will respond "OK ".
- Type auth dpac dpac
- (The default username and password are "dpac' .)

Type wl-ssid

- Enter the SSID of your wireless network.
- (The SSID is case sensitive.)
- The device should respond with "OK".

Sample Settings for WPA2-PSK Security:

- (Refer to the Command Line Reference Guide if using different security.)
- wl-security WPA2-PSK (<CR>)
- pw-wpa-psk password
- wl-dhcp 0
- wl-ip xxx.xxx.xxx.xxx (Valid IP on Network) commit restart

After restart, your LEDs should be green for Power and Link. This indicates that you have authenticated to your network. (If this does not happen you should double check your configurations on the AP.)

After resets or restarts, you will need to send the ÿ~ABD command to establish the initial connection to the serial port. This allows you to configure the unit.

If you are using Tera Term, you must have the general setup language set to English.

Web Interface Access

Initial setup must be done through the serial port. After you have done this, you will be able to use the Web interface to make changes.
Type the IP address of the ABDN-SE-DP551/553 into your web browser. A login screen should appear.

- Username: dpac
- Password: dpac
- Most settings can configured with the Express Setup page on the web interface.
- When making changes, you must click "Commit" at the bottom of the page or they will not be saved. Then click

"Restart".

- You will now be able to use the IP address to access the web browser interface. You will also be able to use the CLI method via the serial port.

Installing Virtual COM Ports

Install and run the Airborne Management Center (AMC) application. You can install it from the included CD or download and install it from the B+B SmartWorx website.

- Group: manuf
- Password: dpac
- Your ABDN-SE-DP551/553 should be recognized by the Airborne Management Center software.
- Right click on the device's name, select "Configuration Management" and "Install VCOM".
- On the VCOM Driver Port Screen, select the COM port that you would like to use.
- Choose how you would like the Windows Device Manager to display the device.
- Verify that Windows Device Manager now shows an additional COM port under "Ports (Com & LPT)".

(**Continued**)

CLI commands let you request status or change parameter settings. A full list of commands is provided on your software CD. You can also download this information at **www.advantech-bb.com**

If you have questions, visit our Knowledge Base at **www.advantech-bb.com**

Troubleshooting

To Do A Factory Reset: Apply power while you have the Reset button held in. Hold the Reset button and release after 10 seconds.
After Initial Configuration: If you have an Amber "Power" LED and a Red "Link" LED combination, please verify that the SSID and security are correct. These parameters are case sensitive.

LED	COLOR		AIRBORNE DEVICE STATE
POWER	Off		Adapter is not powered.
	Red		Adapter failed Power On Self Test (POST).
	Amber		Adapter passed POST but is not configured for wireless network communication.
	Green		Adapter passed POST and is configured for wireless communication.
LINK	Off		Adapter is not powered.
	Red	Off	(Periodic Blinking) Adapter is searching for a valid network (Access Point) that matches device's configuration.
	Green		Adapter has successfully associated with an Access Point.
COMM	Off		If Power LED is also Off, then Adapter is not powered. If Power LED is On, then either: • A physical connection detected on Serial/Ethernet cable. • No TCP session from wireless interface has been established.
	Red		No physical Serial/Ethernet connection has been detected.
	Red	Off	(Blinking – OFF/Red) A physical Serial/Ethernet connection has been detected and there is traffic across the interface. No TCP connection to the adapter has been established on the wireless interface.
	Amber		A TCP connection to the adapter from the wireless interface has been established but no physical connection on the Serial/Ethernet interface has been detected.
	Green	Amber	(Blinking – Green/Orange) A physical Serial/Ethernet connection has been detected and there is Serial/Ethernet traffic across the interface. A TCP connection to the adapter has been established (On WLAN or Ethernet interface).
	Green		A physical Serial/Ethernet connection has been detected. A TCP connection to the adapter has been established from the WLAN or Ethernet interface but no traffic has been detected.

Please see the Knowledge Base on the B+B SmartWorx website if you run into any issues while trying to follow this guide.

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  Recommended Accessories

  Null Modem Cable
  Model 232NM9FF3

  802.11 Wireless Router, Access Point & Serial Device Server
  Model APXN-Q5420

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ABDN-SE-DP551 &
ABDN-SE-DP553
Wireless Serial Adapter

Before you begin, be sure you have the following

- + ABDN-SE-DP551 or ABDN-SE-DP553
- + 5 VDC Power Supply, 2.1 mm barrel jack (included)
- + Dual Band 2dBi RP-SMA Antenna (included)
- + Software CD (included)

Fast and easy on the web: **www.advantech-bb.com**

Documents / Resources

	B B SMARTWORX ABDN-SE-DP553 Wireless Serial Adapter [pdf] User Guide ABDN-SE-DP553 Wireless Serial Adapter, ABDN-SE-DP553, Wireless Serial Adapter, Serial Adapter, Adapter

References

- **User Manual**