

Order # HDA800 - SPB800 Serial to Wi-Fi Bridge 802.11b/g Starter Kit (EVK)

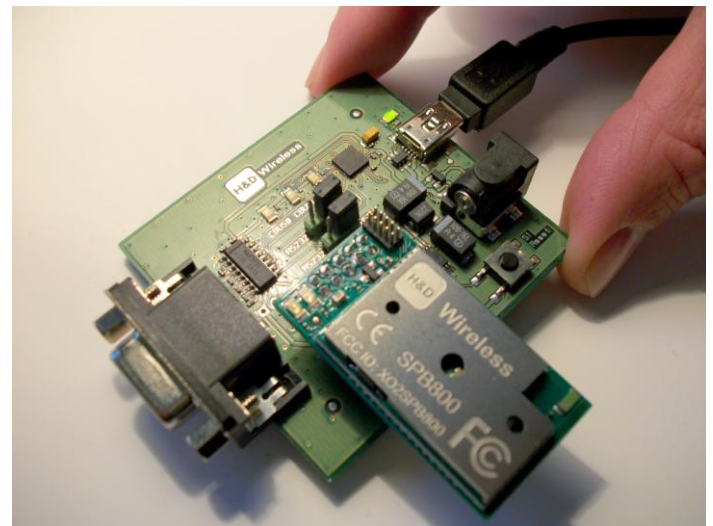
INTRODUCTION

The HDA800 is the EVK for the SPB800 WLAN Module solution. SPB800 is a complete Serial to Wi-Fi module. The solution offers immediate wireless connectivity to the Internet or a local area network for any devices supporting a UART and RS-232 interface. The SPB800 includes a low power, high performance 32-bit Microcontroller unit and ultra low power Wi-Fi. SPB800 operates in two different modes: Serial or API driver mode.

The HDA800 Kit is your engine to develop Your Wi-Fi Application!

WHY USE THE HDA800 EVALUATION KIT? :

- ✓ Easy to use Starter kit for quick design turn around
- ✓ Easy connection to PC with USB or RS-232
- ✓ Immediate Wi-Fi connectivity in serial-port to Wi-Fi mode (no programming at all).
- ✓ Develop and test your application on a Linux host before you go on target!
- ✓ As oWL© Pico API is only dependent on the UART interface, the application will be supported on the target platform with almost no extra work
- ✓ Simple upgrade of SPB800 firmware
- ✓ Explore and evaluate the oWL © Pico reference designs :
 - HTTP server
 - TTCP server/client
 - NTP client
- ✓ Reference software and documentation included in Software



- Add Wi-Fi with no changes to the host CPU, eg. to Retrofit existing applications and/or new.
- Add Wi-Fi capability using the oWL© Pico API to your platform! - <http://pico.hd-wireless.se>

SELECT Wi-Fi USAGE FOR YOUR APPLICATION:

API Driver Mode – oWL Pico

Add Wi-Fi and network capabilities with H&D Wireless oWL Pico API (2kB) to develop network applications without the need for Wi-Fi drivers, IP-stack and security protocols on host CPU

Application example:
Smart Home applications,
Industry automation,

Use: HDA800 + Turn key Software Package and visit <http://pico.hd-wireless.se>
Linux or AT XPLAN host. Explore reference code functionalities

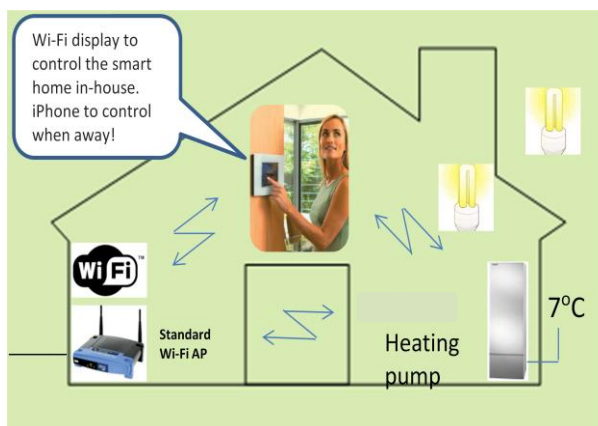
Serial Mode – UART to Wi-Fi

Add Wi-Fi with no changes to the host CPU, eg. to Retrofit existing applications and/or new.

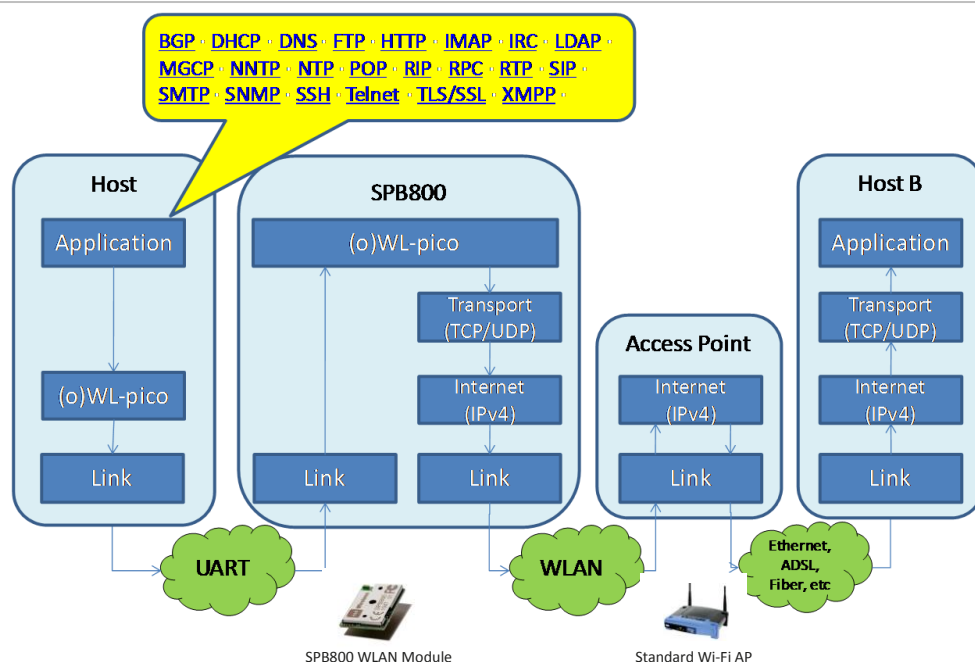
Application example: heating pumps, industry scales, medical equipment, industry control tools

Use: HDA800 + Turn key Software Package
Serial – Wi-Fi operating mode:
Connect the HDA800 to a Windows PC. Explore wi-fi connectivity on your PC.

Smart Homes Go Wi-Fi to control lightning, heating, energy..



SPB800 Protocol stack



Since the oWL® Pico API provides a socket interface which supports TCP, UDP and RAW sockets, there are no restrictions on which upper layer protocols that can be used on the host. The reference design software includes example implementations of a HTTP server, a NTP client, and a TTCP client/server.

What is in the HDA800 EVK box?

In the evaluation kit you will find:

- ✓ One(1) SPB800E- SPB800 WLAN module, mounted on a test board with 10-pin socket and status LED's
- ✓ One(1) Evaluation board with serial and USB support
- ✓ One(1) USB memory stick with documentation, user guides, reference SW and complete turnkey software package
- ✓ One(1) USB cable

Development tools and documentation is updated frequently.

Please visit the Wiki page for oWL

pico at: <http://pico.hd-wireless.se> and

www.hd-wireless.se/development_kits

See HDA800 demo set up (Q1-2011)
 YouTube H&D Wireless [YouTube Channel](#)



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SPB800 WLAN Module Key Features

Wireless Network Standard Support	IEEE 802.11b/g
Operation Modes	✓ oWL-pico (IP stack on SPB800) ✓ Serial to WiFi
Hardware interfaces	✓ UART ✓ RS-232 (in EVK only)
Wireless Security	✓ WEP/WPA2
Hardware dimensions	34x22x5 mm
Supply Voltage	3.0-3.6V
Operating Temperature, degrees C	-20° - + 70° (commercial) -40° - + 85° (industrial)

Standards Compliance

Country	Approval authority	Regulatory	Frequency band
USA	FCC	FCC	2.4-2.4835
Canada	IC	RSS	2.4-2.4835
EU	National	ETSI	2.4-2.4835

Order Information

Part Number#	Description	Image
HDA800	SPB800 Evaluation Kit: SPB800E, PC connection card, cables and complete Software package	

For additional information please contact Sales at H&D Wireless AB.

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Partners

H&D Wireless AB, official Atmel Wi-Fi partner



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Turnkey Solutions

The reference designs provided are turnkey solutions that will work first time and can be modified and used for customers own products.

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Web site:
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