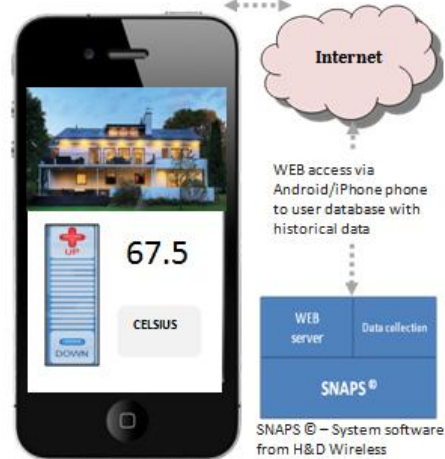


Product Brief: Wireless LAN Module Family SPB800S, SPB800P, SPB850L 802.11b/g/n + TCP/IP, UART Interface

Embed Wi-Fi for wireless control over Internet!

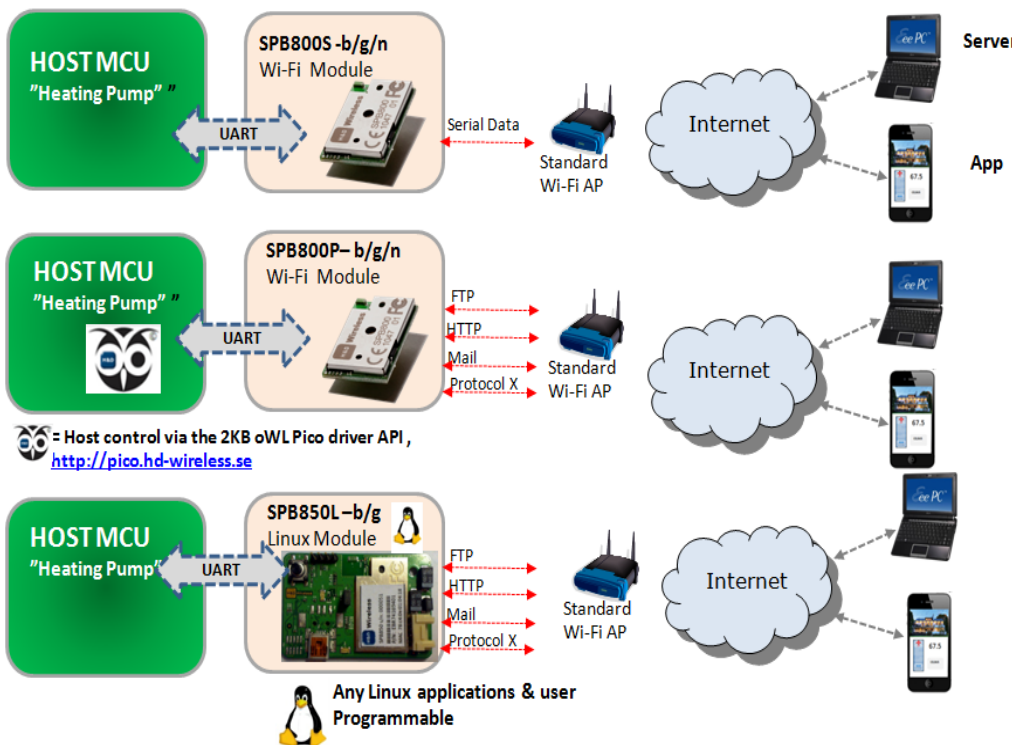


Control your Smart Home or Sensor network devices from a Smart Phone



iPhone are registered trademarks of Apple Inc.
Android is a registered trademark of Google Inc.

The technology from H&D Wireless is a world class Wi-Fi system solution that offers Internet communication between the Cloud service, the Customer's Smartphone and to devices in the Smart home "What do you want to connect"?



INTRODUCTION

The SPB8xx family of solutions is complete Wi-Fi modules with state of the art embedded security protocols and low power features. The SPB8xx includes a matching low power, high performance 32-bit Microcontroller unit. The solution offers immediate wireless connectivity to the Internet or a local area network for any devices supporting an UART interface.

The SPB8xx solution removes the need for Wi-Fi drivers, IP-stack and security protocols on the host CPU. The SPB8xx solution provides the fastest possible design turn around for Customers.

SPB8xx family offers a cost effective solution for retrofitting existing or new UART applications with Wi-Fi Connectivity!

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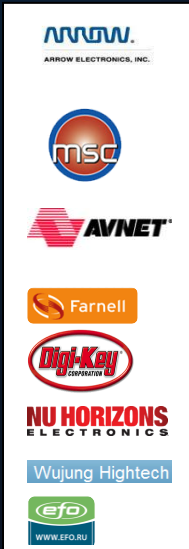
Global Presence & Distribution
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 - EUROPE
 - ASIA
 - MIDDLE EAST
 - AUSTRALIA
 - SOUTH AMERICA
<http://www.hd-wireless.se>

Technical Support
 Software drivers
 Wi-Fi Integration
 Reference designs
 Documentation

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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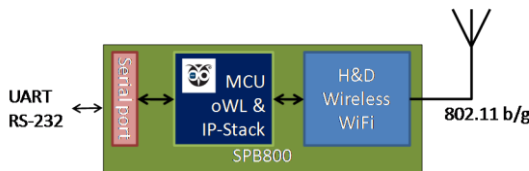
Distributors



SPB8xx WLAN Modules

SPB8xx allows any Microcontroller/CPU with UART interface to access the Wi-Fi network for accessing a LAN or Internet

Product	SPB800S	SPB800P	SPB850L
WLAN 802.11	b/g/n	b/g /n	b/g
Operation Mode	Serial data	Serial data, host control oWL © Pico API	Any Linux applications & user Programmable
Host Driver	n/a	Yes, oWL Pico 2kB on host	n/a
Network protocols	1 TCP	Any	Any
Full TCP/IP Stack included	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reference designs	HDA800 - starter kit	http://pico.hd-wireless.se Web server reference designs.	HDA850 Mother board
Configuration mechanism option	SoftAP	SoftAP	SoftAP

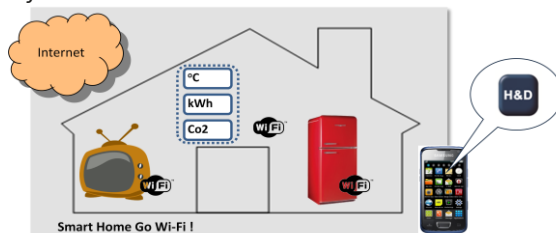


Block diagram

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

H&D Wireless AB is a Global Smart Home solution provider. We enable wireless sensor and multimedia data access to the Internet in an environmental friendly and cost effective way. The solutions are used in a wide range of applications ranging from smart energy meters for CleanTech to streaming data for Digital Media. The technology is world class Wi-Fi modules and application software.



Smart Home Go Wi-Fi !
<http://www.hd-wireless.se>



Specifications

Core CPU	32-bit MCU
Wireless Network Standard Support	IEEE 802.11b/g IEEE 802.11b/g/n
Frequency Band	2.412-2.484 GHz
Operation Modes	✓ API driver mode - oWL-pico ✓ Serial Mode: UART to WiFi ✓ Linux
Modulation Techniques	QPSK, 16QAM, 64QAM DBPSK, DQPSK, CCK, OFDM with BPSK
Hardware interfaces	✓ UART ✓ RS-232* (EVK)
Network protocols	TCP/IP, DHCP, UDP/IP, ICMP, HTTP
WLAN functions, QoS	Power save modes, automatic roaming, Infrastructure mode and Soft AP
Wireless Security	✓ WEP-64 ✓ WEP-128 ✓ WPA-PSK ✓ WPA2-PSK
Hardware dimensions	34x22x5 mm
Current consumption	TX :186mA, RX:66mA, Lowest state: 50 nA
Supply Voltage	3.0-3.6V
Operating Temperature, degrees C	-20° - + 70° (commercial) -40° - + 85° (industrial)
Supported UART baud rates	✓ Supports all standard baud rates from 9600bps to 3.6 Mbps

Order Information

Part Number#	Description	Image
SPB800S-B SPB800S-D	802.11b/g, UART Complete system ready Wi-Fi module. On Chip antenna or External antenna, U.fl connector	
SPB800P-B SPB800P-D	802.11b/g, UART Complete system ready Wi-Fi module Pre programmed with oWL© Pico API. On chip antenna or external	
SPB850L-B	802.11b/g, UART Complete system ready Wi-Fi Linux module. On Chip antenna. User programmable	
HDA800	SPB800 Evaluation Kit: SPB800E, PC connection card, cables and Software package	

For additional information please contact sales@hd-wireless.se H&D Wireless AB. © Copyright 2012, H&D Wireless AB.