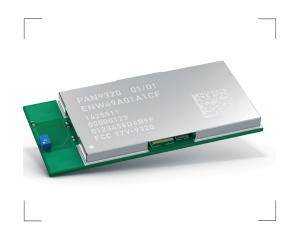
# PAN9320 full embedded Stand-alone WiFi Module 802.11 b/g/n





Industrial Devices Europe GmbH

# SUMMARY

PAN9320 is a stand alone 2.4GHz 802.11 b/g/n WiFi module, which can be integrated into various end applications. All protocols and applications are included and handled by the MCU on the module. Layout design efforts, calibration- and test efforts in production are reduced compared to discrete and other module solutions. This significantly reduces time to market and development risks as internet functionality can be added very easily to exisiting end products with low performance host controller.

# **FEATURES**



#### **Full Embedded**

- Full-featured network stack integrated
- Contains all necessary IoT functionality (Place&Play)
- Integrated Webserver with AJAX/JSON for webapplications
- No stack or software implementation needed on a Host-MCU
- Ideal for Host-MCU with limited resources



#### **Dual Wifi operation**

- Simultaneous support Access-Point- & Infrastructure Mode
- IP configuration will be done fully-automatically
- DHCP-Server offers IP-configuration in AP-mode



#### **Evaluation Kit for quick prototyping**

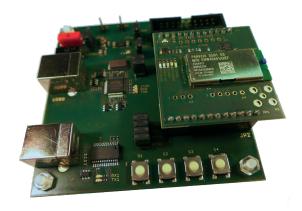
- "Easy-to-use" module for rapid prototyping
- Evaluation and development tool Wifigurator for Windows
- Evaluation kit with pre installed web application
- Access by names (http://yourdevice)
- Getting started tutorials, PC Tool, quickstart guide

#### General

- Surface Mount Type 29,0 x 13.5 x 2.66 mm<sup>3</sup>
- Supports TLS/SSL, https and WiFi security (WPA2) for secure data connection
- Wireless Update of Radio Driver and MCU Firmware with integrated bootloader
- Supports IEEE 802.11 b/g/n, security standards WEP, WPA, WPA2
- Tx power up to +18 dBm (IEEE 802.11b))
- High Rx sensitivity -98 dBm (IEEE 802.11b DSSS 1Mbps)
- Marvell® 88W8782 WLAN System-on-Chip (SoC) and 88MC200 (MCU) inside

Design and Specifications are subject to change without notice. Ask the factory for technical specifications before purchase and/or use. If there is any doubt regarding the safety of this product, kindly inform us immediately for technical consultation.

PAN9320 Rev. 1.0



# **APPLICATIONS**

- White goods
- Home Automation
- Internet of Things
- Fitness Equipment
- Lighting Control
- M2M Communication
- Patient Monitors

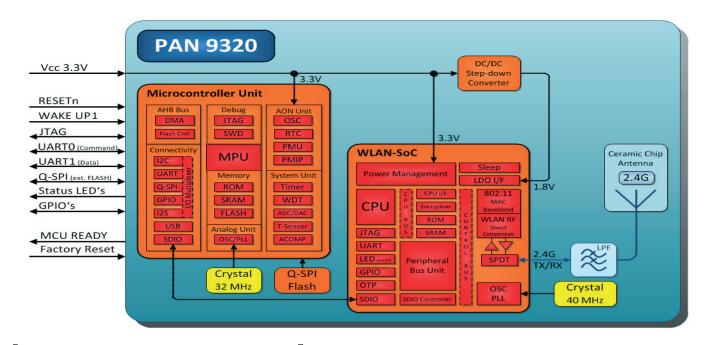
#### - Printer

- Smart Meters
- Media Player
- Sensors
- Healthcare
- POS Terminal

# Part Number

| Part-Number  | Description                                  |  |
|--------------|--|--|
| ENW49A01A3EF | PAN9320, VIPAR stack                         |  |
|              | -30~70°C, chip antenna                       |  |
| ENW49A01C3EF | PAN9310, VIPAR stack<br>-30~70°C, 50 ohm pad |  |
|              | -50 70 C, 50 01111 pau                       |  |
| ENW49A01AYEF | PAN9320 Evaluation Kit                       |  |
| ENW49A01AZEF | PAN9320 ETU Module                           |  |

### **BLOCK DIAGRAM**



# TECHNICAL CHARACTERISTICS

| Parameter                   | Value          | Condition / Note                 |
|-----------------------------|----------------|----------------------------------|
| Software                    |                | Full Embedded                    |
| Rx Sensitivity              | -98 dBm        | @1M-DSSS (Details see Datasheet) |
| Tx Power                    | +18 dBm        | 801.11b                          |
| Power Supply                | 3.0 to 3.6 V   |                                  |
| Current Consumption         | 430 mA, 160 mA | Tx, Rx max @11b                  |
| Operating Temperature Range | -30~70°C       |                                  |
| Size                        | 29.0x13.5x2.66 | mm                               |