Wireless LAN

23 mm

36 mm
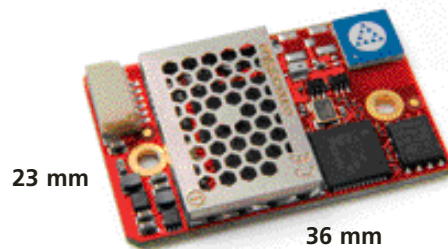
Product Brief OWSPA311g

The SERIAL WIRELESS LAN MODULE™ from connectBlue has been developed for integration in industrial devices providing state of the art low power features. The module minimizes the work needed to implement Wireless LAN (IEEE 802.11b/g) in a device as it provides all software, hardware, type approval, EMC certification etc. It is developed for reliable, high demanding industrial devices and applications and requires no host driver.

The Serial Wireless LAN Module is a complete Wireless LAN implementation. The Wireless LAN module has a small form factor and the interface layout is the same as the Bluetooth modules from connectBlue, which enables customers to prepare their device for both Bluetooth and/or Wireless LAN.

Key Features

- Supports both 802.11b and 802.11g
- Radio type approved for Europe
- Radio type approved for US and Canada
- Compliant with EMC standards
- Industrial temperature range -30 to +85 C
- Exceptional low power modes
- Compatible with connectBlue Bluetooth modules
- Supports security features WEP64, WEP128, WPA-PSK, WPA2-PSK (TKIP/AES), LEAP
- Ad-hoc and infrastructure mode
- Internal or dual external antennas (diversity supported)
- UART speed up to 2.7Mbps
- Custom baud rate

connectBlue™

Technical Data

SPECIFICATIONS
PHY/MAC
802.11b and 802.11g
Extended rate protection
Regulatory domain support
Advanced power management
Defragmentation
Antenna diversity

Operational modes
BSS (infrastructure)
IBSS (ad-hoc)

Security
WEP64
WEP128
WPA-PSK
WPA2-PSK
TKIP
CCMP (AES)
LEAP

Software
All software is included in the module
Configurable locally or over Wireless LAN using
   AT commands or PC Wizard (Wizard included)

Protocols
TCP
UDP

Additional Features
TX power calibration
Link adaptation
Advanced power management
DHCP-client
DNS-resolver
Roaming
Connect on data trigger

Serial interface
UART Logic-Level
Supported baud-rates: 300 - 2.7Mbps
Support for non-standard baud rates
Flow control: CTS/RTS or none
Full modem signalling

Connectors
Board-to-board connector
Solder pads
JST 6-pin connector (optional)

Antennas
Internal or single and dual external (diversity)

Power
3.3-5.5 VDC
Transmitting at full speed: 130 mA @ 5 VDC
Sleep mode (connected): 7.4 mA @ 5 VDC
Stop mode (disconnected): 0.76 mA @ 5 VDC

Dimensions
23 x 36 x 3.1 mm

Weight
3.8 g

Type Approval
R&TTE (Europe)
FCC/CFR 47 part 15 unlicensed modular transmitter approval
IC (Industrie Canada)

Environmental
Maximum operating temperature: -30 - +85 °C
Storage temperature: -40 - +85°C
Humidity RH 5-90% non-condensing
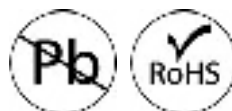Shock and vibration: IEC 61131-2

Certifications and Compliance
R&TTE Directive 1999/5/EC
EN 300 328 V1.6.1 (2004-11)

EMC Directive: 89/336/EEC
EN 301 489-1 V1.4.1 (2002-08)
EN 301 489-17 V1.2.1 (2002-08)
EN 61000-6-2 (2001)

Safety Compliance
EN 60950-1:2001 and/or IEC 60950-1:2001 (1st Edition)
EN 60950-1/A11:2004 + Corrigendum:2004

Order Number

cB-OWSPA311gi-04	OEM Wireless LAN module Internal Antenna and Standard Connectors
cB-OWSPA311gi-06	OEM Wireless LAN module Internal Antenna and JST 6-pin connector
cB-OWSPA311gx-04	OEM Wireless LAN module External Antenna and Standard Connectors
cB-OWSPA311gx-06	OEM Wireless LAN module External Antenna and JST 6-pin connector

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