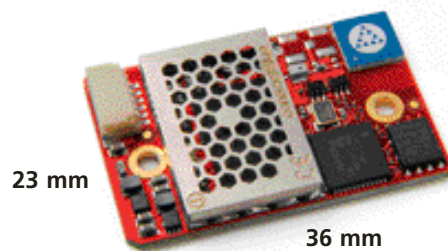




## Wireless LAN



### 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

# 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

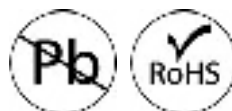
*R&TTE Directive 1999/5/EC*  
EN 300 328 V1.6.1 (2004-11)

### *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

**connectBlue**<sup>TM</sup>

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