

Waveport

Product summary

Accessing Wavenis sensor networks from PCs and mobile Handhelds

Complete mobility and easy access to installed Wavenis sensor modules of all kinds – Waveport gives you both. With USB, serial or Bluetooth connections for your laptop or mobile terminal, Waveport is the ideal accessory for reading, controlling, and configuring Wavenis-based wireless sensors in a wide variety of industrial, domestic, and professional applications.

Whichever connection type you choose, this versatile product lets you connect mobile equipment directly to installed Wavenis nodes in wireless mesh networks.

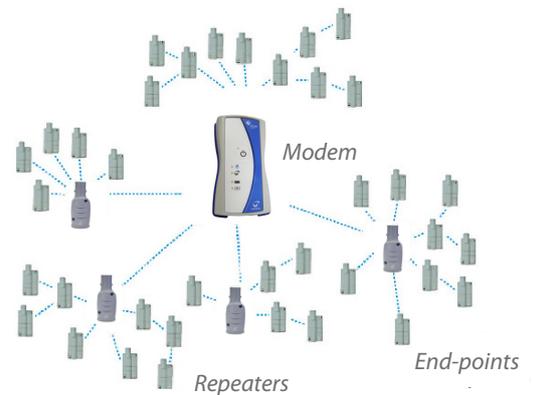
Waveport is as useful in automatic metering, telemetry, and industrial monitoring, as well as access control, security, healthcare, and UHF RFID systems. Use it with your application-specific software to read and control remote sensors quickly while wirelessly saving time and the expense of manual operations. This device is the standard Wavenis access point node. (wireless modem).

- Access Wavenis networks with mobile computers and handhelds in mobile scenarios
- Manage Wavenis LAN configurations from your PC
- USB, RS232, or Bluetooth link.
- Benefit from wireless features for your software applications



Easy connections for software tools

With the open source Wavenis SDK libraries, there's no limit to the applications you can use with Waveport. Our fully documented application programming interfaces (APIs) allow you to write custom applications to meet your exact needs, and to configure Waveport's internal parameters and services to match your installed network nodes. Frequency hopping (FHSS) and data interleaving ensure robustness and interference-free wireless operations. From network configuration and administration to walk-by data monitoring, Waveport provides a robust connection to the entire line of Wavenis-powered solutions.



Get access to any Wavenis enabled device in the field.



Product Specifications

- 3 versions: USB, RS232, and Bluetooth
- Complex-Wakeup enabled (save battery life in dense network and fast reading)
- Supports asynchronous and synchronous modes
- Wavenis SDK libraries and API to drive any Wavenis device

Wavenis Properties Overview

- Operates in license-free ISM 433, 866, 868, or 915MHz
- EN300-220 / FCC15.247 certified & compliant
- Typical rate:
 - 9.6kbps (433, 866 & 868MHz)
 - 19.2kbps (915MHz)
 - more on demand
- Frequency Hopping Spread Spectrum (FHSS)
- GFSK modulation
- Single channel operation for narrowband applications (alarms)
- Data interleaving, Forward Error Correction BCH (31,21)
- Automatic Frequency Control (AFC) for optimal performances over operating lifetime
- Quality of Service management (RSSI) and output power control
- Point-to-Point, Point-to-Multipoint (broadcast, polling) modes, and native repeater (up to 3 hops)
- Tree and star network topologies
- Designed for reliability, power savings, network coexistence
- Access hard-to-reach devices with link budget of 124dBm (25mW)
 - Line-of-sight range up to 1km (25mW/+14dBm and 10mW/+10dBm)
 - Line-of-sight range up to 4km (500mW / +27dBm)
 - Sensitivity: -110dBm @ 9.6kbps

General features

- Integrated OEM platform with Wavenis stack
- 25mW USB (868/915MHz) and 10mW USB/RS232 (433MHz) versions
- 500mW class for very long-range (RS232 version only)
- Wavenis access point for communication with any Wavenis enabled device
- Wavenis SDK libraries and API available to easily develop software to manage your modules
- Delivery package:
 - USB: device with 1 m USB cable (self power supplied)
 - Serial: device with crossover serial cable, 5VDC adaptor & external antenna(500mW only).
 - Bluetooth: mini USB cable and beltclip.

Physical description

- Operating temperature range: -20° to +70°C
- Dimensions (without antenna):
 - USB: 90 x 50 x 24mm
 - RS232: 90 x 50 x 24mm
 - Bluetooth: 120 x 65 x 27mm

Product codes

	433MHz	868MHz		915MHz	
	10mW	25mW	500mW	25mW	500mW
USB	WPO433-FP-10-U	WPO868-FP-25-U		WPO915-FP-25-U	
RS232	WPO433-FP-10-R		WPO868-FP-500-R		WPO915-FP-500-R
Bluetooth	WPO433-FP-10-BLUE	WPO868-FP-25-BLUE			



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