

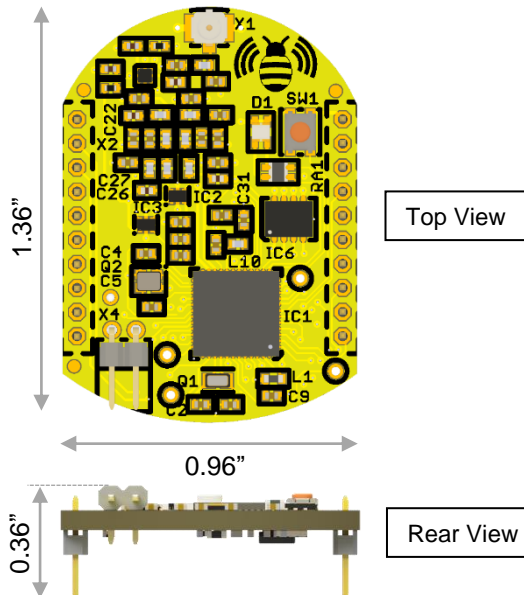
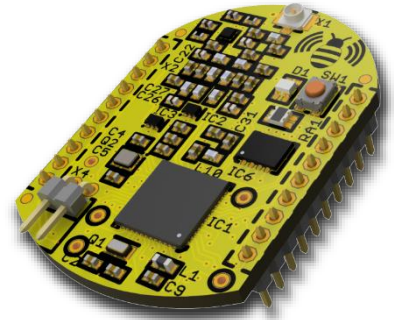


WillowBee

Industrial LoRaWAN Wireless Module

WillowBee is an industrial wireless microcontroller module that is designed for LoRaWAN sensor end-node designs and embedded applications that need LoRaWAN communications. WillowBee uses the popular STM32WL Cortex-M4 microcontroller from ST Micro. This microcontroller combines a computer unit and a LoRaWAN radio on a single chip.

WillowBee is pin compatible with other popular wireless devices. WillowBee is fully backed by a 3-year warranty, technical support and application assistance from BiPOM Electronics, Inc.

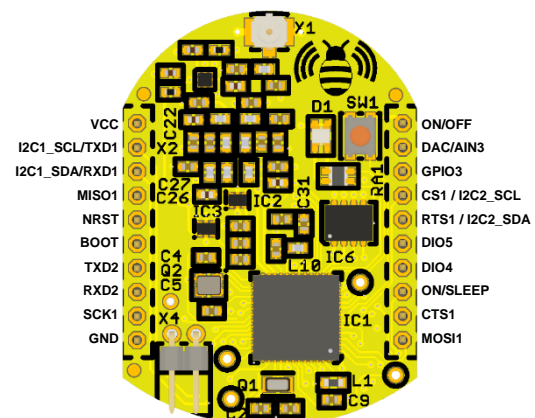


Microcontroller Features:

- Built-in LoRaWAN 1.1.0 Stack
- Ultra Low Power
- Suitable for battery operation
- User programmable
- Configurable power output
- Maximum output power: 22 dBm
- Frequency Bands: US915 / AS915 / AU915 / EU868 / CN779 / EU433 / KR920 / IN865 / RU86 (Supported but not officially certified in all regions)
- 64 KB of RAM and 256 KB of Flash available for user applications

WillowBee Specifications:

- Pin compatible with popular modules
- U.FL Connector
- Dual Power option: Battery or DC Power
- Temperature Range: -40°C to +85°C
- Dimensions 1.36" x 0.96" x 0.36" (34.54 mm x 24.38 mm x 9.14 mm)
- 2 LEDs and 1 Button
- 32-Mbit Serial Flash
- 15 Configurable Pins
- Drivers for ADC/IO/DAC/SPI/UART/I2C Protocols





WiPOM

Wireless Point of Monitoring

WiPOM is a software application package that adds sophisticated data logging, remote terminal, and PLC-like capabilities to the WillowBee sensor board. WiPOM can run on the STM32WL family of processors, WiPOM handles all aspects of Industrial IoT applications development, including I/O management, tags, alarms, events, SMS/email handling, MODBUS master and slave capability, modem detection, and management and Cloud portal support. WiPOM runs directly on WillowBee sensor board. Coupled with the WiPOM Client running on a Windows PC or web server, programming the WillowBee sensor board is reduced to only a series of configurations to build a complete IoT system. WiPOM takes software out of the equation for faster time to market. Creating remote monitoring and control systems has never been easier.

