

Mini-PCIe Sub-1GHz Long Range IoT Radio

The GW16122 is Mini-PCIe radio card that provides Low-Power, Long-Range Sub-1 GHz radio communication for Internet of Things networks. The second generation GW16122 features the Texas Instruments CC1352P SimpleLink™ Ultra-Low-Power Dual-Band Wireless MCU with an integrated 20dBm power amplifier operating at the Sub-1 GHz frequency for long distance IoT sensor applications. Software from TI includes a TI 802.15.4 Stack, 6LoWPAN, Wi-SUN and KNX RF support. The GW16122 additionally features a 2.4 GHz RF output for Bluetooth 5 LE, Thread and Zigbee. This Mini-PCIe card enables a Gateworks SBC as an IoT Gateway for other IoT nodes.

FEATURES

- Ti CC1352P Dual-Band Wireless Radio Transmitter/Receiver
- Sub-1 GHz Radio, 868MHz EU, 915 MHz US (default)
 - Low Power, sensor nodes can run on coin cell battery
 - Long Range Communication: -121dBm Receive Sensitivity
 - 20dBm Output Power
 - Minimal Interference – Narrow Bandwidth
 - Texas Instruments TI-RTOS and TI-15.4 Stack
 - M-Bus, IEEE802.15.4g, Contiki 6LoWPAN, Wi-SUN, KNX RF
- 2.4 GHz RF Output Supports:
 - Bluetooth 5 with LE Coded Phy Support
 - Thread, Zigbee
- Analog, I2C and Digital I/O application connector
- Compatible with Texas Instruments LaunchPad LAUNCHXL-CC1352P
- No subscription, Open Source Software, No Consortium or Alliance Membership Required
- Private Network - No Third Party Network Dependency or Fees
- Mini-PCIe (USB Channel) Compatible with Gateworks Single Board Computers



SPECIFICATIONS

Electrical

Input Voltage

- 3.3V From Mini-PCIe Edge Connector

Operating Current

- 25mA Typical @ 3.3V

Mechanical

Dimensions

- 30.0x60.8x11.5mm (1.18x2.39x0.45in)

Weight

- .2 oz (5.7g)

Environmental

Operating Parameters

- Temperature: -40°C to +85°C
- Humidity (non-condensing): 20% to 90%
- MTBF: TBD Years at 55°C

Storage Parameters

- Temperature: -40°C to +85°C
- Humidity (non-condensing): 5% to 95%

ORDERING OPTIONS

Product Customization

The GW16122 can be customized for high volume applications. Contact the factory for additional information.

- Form factor
- Removing peripherals to achieve lowest cost
- Frequency tuning to other SubGHz bands