


<b>NEW PRODUCT</b>	 A National Instruments Company	<b>Release Year</b> 2018	<b>Released Quarter</b> Q1
<b>Digilent Part Number</b> 410-359		<b>Category</b> Pmods	

## OVERVIEW

**Product Name:** Pmod BLE: Bluetooth Low Energy Interface

**Product Subtitle:** Add low power wireless communications to your systems

**Product Description:** The Digilent Pmod BLE is a powerful peripheral module meant for use with any UART enabled development board. This Pmod employs the [Roving Networks RN4870](#) to create a fully integrated Bluetooth Low Energy interface. This chip features an onboard Bluetooth stack that makes connecting and communicating with any Bluetooth 4.X device possible through simple UART commands. The [RN4870](#) also features four built-in GATT services: Device Information, Airpatch, BeaconThings, and UART Transparent data streaming. It also allows up to five custom public services and up to four custom private services, each allowing up to eight custom characteristics. The Pmod BLE is an affordable, versatile, low energy addition to the wireless Pmod library.

**Key Search Terms:** Microchip, Roving Network, RN4870, Embedded, Wireless communications, Internet of Things IoT, BLE, Bluetooth

**Video Link:** N/A

**Datasheet:** <https://reference.digilentinc.com/reference/pmod/pmodble/reference-manual>

### Demo / Project Links:

[https://reference.digilentinc.com/\\_media/reference/pmod/pmodble/pmodble-arduino-library.zip](https://reference.digilentinc.com/_media/reference/pmod/pmodble/pmodble-arduino-library.zip) (Arduino)

<https://reference.digilentinc.com/learn/programmable-logic/tutorials/pmod-ips/start> (FPGA)

### Features

- [Roving Networks RN4870](#)
- Bluetooth® Smart 4.2 BLE compatible
- Add wireless capability with low power Bluetooth radio
- ASCII command interface over UART
- UART transparent service for serial data streaming
- Secure communications, 128-bit AES encryption, and white list capabilities
- Customizable GAP, GATT, SM, L2CAP, and integrated public profiles
- 12-pin Pmod port with UART interface
- Follows the Digilent [Pmod Interface Specification 1.1.0](#) type 3A

### Product Image



### Image Links:

- <https://flic.kr/p/GfY4DX> (Oblique)
- <https://flic.kr/p/GfY4BH> (Top)
- <https://flic.kr/p/GfY4G2> (Bottom)

### 3 Target Applications

- Internet of Things (IoT)
- Remote control
- Beacon applications

### Related Products

- All Digilent FPGA boards
- Basys Mx3 (PN: 410-336)

## PRICE INFO

<b>MSRP</b>	\$24.99
<b>Academic Price</b>	NA
<b>Distributor Discount</b>	20%
<b>Distributor Price</b>	\$19.99

## PRODUCT DATA

<b>Dimension*</b>	1.5x0.5x0.8 inches	<b>Weight*</b>	0.05 lbs
<b>Product Type</b>	<input checked="" type="checkbox"/> Digilent <input type="checkbox"/> Resell		
<b>Packaging</b>	ESD Bag		
<b>Export</b>	5A992.c	<b>HTS Code</b>	8517620050
<b>Kit Contents</b>	<input type="checkbox"/> USB Cable <input type="checkbox"/> Voucher <input type="checkbox"/> Power Supply Other: <Example>		
<b>Certifications</b>	<input checked="" type="checkbox"/> CE <input checked="" type="checkbox"/> RoHs <input checked="" type="checkbox"/> Reach <input type="checkbox"/> Other:		