# afero

#### **Model Name** Afero Modulo-1B Development Board

Afero Model Number Modulo-1B-MU

Bluetooth Radio Bluetooth® low energy wireless technology (5.0)

Bluetooth Antennas

**Antenna Configuration** Built into the module.

Maximum Transit Power +3.5dBm (at antenna port)

**Receive Sensitivity** -90dBm (at antenna port)

**Power Consumption** Tx/Rx 7.0/6.0 mA typ

Security Features Cryptographic coprocessor with secure hardware-based key storage

Host Interface SPI, UART

Interface Pins 4× GPIO

LED Indicators

Buttons

1

Ports 1× 5V, USB

**Certifications** FCC, IC Compliance, CE

**Dimensions** 62W x 17.9H x 11.1D mm

**Weight (Earth ABL)** 5 g **Package** 

SIP DIP **Power (VCC)** 4.25 - 5.5V (configurable for 2.1 - 3.6V DC)

**Operating Temperature** 0 to 40° C

Storage Temperature -20 to 60° C

**Operating Humidity** 10 to 80% non-condensing

**Storage Humidity** 5 to 90% non-condensing



## muRata + ofero

### The Afero Modulo-1B-MU Development Board

Your products can enjoy world-class secure connectivity by leveraging the fully integrated and secure IoT solution from Murata and Afero.

Murata is a worldwide leader in the design, manufacture and sale of electronic components, communication modules, and power supply modules. The secure Afero IoT Platform<sup>™</sup> is unmatched in the industry, built upon the fifth largest IoT patent portfolio in the world.

The Afero Modulo-1B development board family provides – in minutes – secure connectivity, a mobile app, and cloud API.

#### **Silicon-Backed Security**

Representing best practices in device, data, and communication security, the Afero Modulo-1B family contains the Afero Secure Radio module (ASR). The module comes with authentication, encryption, and multi-pathing connection management software, ensuring not just the highest level in security, but also the most reliable and easy-to-use connection to the Cloud.

#### **Flexible Form Factor**

Use Modulo-1B standalone, or as a tool to enhance your Arduino project. Modulo-1B attaches to a compatible Arduino® board (such as Uno) via the Afero Plinto<sup>™</sup> shield, or to a Teensy development board directly.

#### **Communication Protocols**

Modulo-1B provides four GPIO lines of programmable bidirectional I/O. ASR uses the Afero Serial Protocol (afPro™) over Serial Peripheral Interface or UART to communicate with an external MCU.

#### Quick & Easy Setup

Use your smartphone to install the Afero mobile app, create a developer account, then scan the QR code on your Modulo-1B. You're ready to start your project.

#### **Smart Devices Made Easy**

Once you design your project and decide what functions you want Modulo-1B to control, use the Afero Profile Editor™ to step you through configuration and mobile app creation.

#### **IoT That Just Works**

loT is at the heart of digital transformation. Let Afero assist you in differentiating and bringing your solutions to market, and help you launch your organization to a higher growth path.

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