MODEL NAME
Afero Modulo-1 Development Board

AFERO MODEL NUMBER
Modulo-1

BLUETOOTH RADIO
Bluetooth® low energy wireless technology (4.1)

NUMBER OF BLUETOOTH ANTENNAS
1

ANTENNA CONFIGURATION
Microstrip L antenna

MAXIMUM TRANSMIT POWER
+3.5dBm (at antenna port)

RECEIVE SENSITIVITY
-92dBm (at antenna port)

POWER CONSUMPTION
Tx/Rx peak 15.5/14.5 mA

SECURITY FEATURES
Cryptographic co-processor with secure hardware-based key storage

HOST INTERFACE
SPI

INTERFACE PINS
4× GPIO (1× comparator with optional external voltage reference), debug UART

LED INDICATORS
1

BUTTONS
1

PORTS
1× 5V USB

CERTIFICATIONS
FCC, IC

COMPLIANCE
Bluetooth, RoHS, TELEC

DIMENSIONS
59.69W x 17.78H x 4.445D mm

WEIGHT (EARTH ABL)
5 g

PACKAGE
SIP DIP

POWER (VCC)
2.1 - 3.6V DC

OPERATING TEMPERATURE
0 to 40° C

STORAGE TEMPERATURE
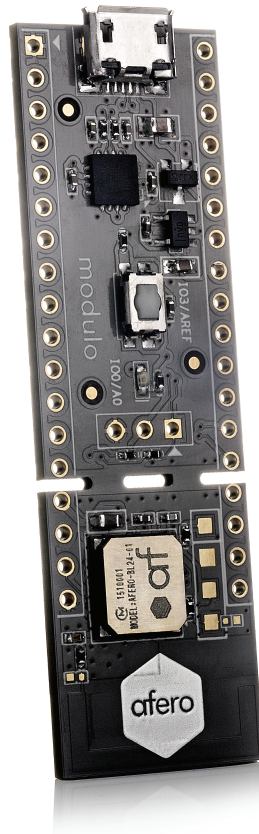**-20 to 60° C**

OPERATING HUMIDITY
10 to 80% non-condensing

STORAGE HUMIDITY
5 to 90% non-condensing

Afero development starts here. The **Afero Modulo-1™ development board** makes it easy to prototype and build connected products using the Afero IoT Platform™. Use our Modulo-1 development board to give your project secure connectivity, a mobile app, and cloud APIs in minutes.

The Heart of Modulo-1: ASR-1™ Modulo-1 contains the Afero Secure Radio module (ASR-1), which comes with authentication, encryption, and connection management software, ensuring a secure and reliable connection to the Afero Cloud™.

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

Communication Protocols Modulo-1 provides four GPIO lines of programmable bidirectional I/O: three configurable to analog ADC or comparator inputs, and one as an external analog reference. The ASR-1 uses the Afero Serial Protocol (afPro™) over a Serial Peripheral Interface (SPI) bus to communicate with an external MCU.

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

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

Afero builds integrated hardware, software, and cloud services for secure IoT connectivity and data analytics. The Afero Modulo-1 allows developers to take a "hands on" approach to developing with the Afero IoT Platform.