MODEL NAME
Afero Modulo Development Board

AFERO MODEL NUMBER
Modulo

BLUETOOTH RADIO
Bluetooth® Smart 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 MSL)
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 development board** makes it easy to prototype and build connected products using the Afero IoT Platform. Use our Modulo development board to give your project secure connectivity, a mobile app, and cloud APIs in minutes.

The Heart of Modulo: ASR-1   Modulo 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 standalone, or as a tool to enhance your Arduino project. Modulo attaches to a compatible Arduino® board (such as Uno) via the Afero Plinto shield, or to a Teensy development board directly.

Communication Protocols   Modulo 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. You're ready to start your project.

Smart Devices Made Easy   Once you design your project and decide what functions you want Modulo 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 allows developers to take a "hands on" approach to developing with the Afero IoT Platform.

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