

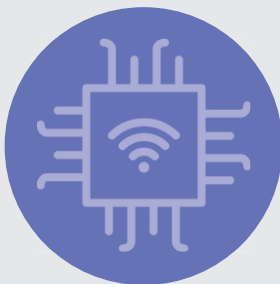
The MiP Series



A family of high performance LPWAN wireless communication modules designed for IoT applications with micro on-board



MAIN FEATURES



High Radio Performance

The cutting edge technology for the radio chipset performance for Europe (+14 dBm) and USA (+20 dBm)



Multi-Protocols in one single chip

More protocols in one single MiP wireless module like: wM-Bus + LoRaWAN or LoRa + SigFox



LPWAN Protocols

wM-Bus, LoRaWAN, LoRa Mipot, LoRa Modem, Sigfox, Ml0Ty



Secure element

Optional hardware secure element



Built-In-Up-To-Date IOT Stacks



World Wide SubGHz Frequency Bands

NEW MODULES



WORLDWIDE CHIP SOLUTION



Worldwide frequency range

SubGHz Frequencies,
868 MHz ÷ 960 MHz



The Mip series supports a variety of international

Public Networks: LoRaWAN, Sigfox.

Private Network: LoRa Modem, LoRa Mipot, wM-Bus, Mioty.

TECHNICAL CHARACTERISTICS



Micro on-board: Single Core M4 / Dual Core M4 M0+



LoRaWAN / LoRa / wM-Bus / SigFox / Mioty



LGA form factor with 52 pads



11.30 mm x 8.90 mm (Size)



SubGHz frequencies (868 MHz ÷ 960 MHz)



SPI, I²C, UART, LPUART (Peripheral Interfaces)



Secure element (Optional)



-40°C + 85°C (Temperature Range)



- 115 dBm@wM-Bus

- 135 dBm@LoRa



+14 dBm@868 MHz

+ 20 dBm@915 MHz



50 Ω antenna pad



Power consumption:

100 mA@+14 dBm

140 mA@+20 dBm



Power Down 2.2 µA

| PART NUMBER | COUNTRIES | PROTOCOLS | CERTIFICATIONS | DESCRIPTION |
|-------------|-------------|----------------------|------------------------|----------------------------------|
| 32001505AEU | Europe | wM-BUS | CE | MiP-Wm-1C128N-US – Single Core |
| 32001506AEU | Europe | wM-BUS | CE | MiP-Wm-2C256N-EU – Dual Core |
| 32001505BEU | Europe | LoRaWAN | LoRa Alliance, CE | MiP-Lw-1C128N-US – Single Core |
| 32001506BEU | Europe | LoRaWAN | LoRa Alliance, CE | MiP-Lw-2C256N-EU – Dual Core |
| 32001505CEU | Europe | LoRa Mipot | CE | MiP-LoMi-1C128N-EU – Single Core |
| 32001506CEU | Europe | LoRa Mipot | CE | MiP-LoMi-2C256N-EU – Dual Core |
| 32001505DEU | Europe | LoRa Modem | CE | MiP-LoMo-1C128N-EU – Single Core |
| 32001506DEU | Europe | LoRa Modem | CE | MiP-LoMo-2C256N-EU – Dual Core |
| 32001505FEU | Europe | LoRaWAN + LoRa Modem | LoRa Alliance, CE | MiP-LwMo-1C128N-EU – Single Core |
| 32001506FEU | Europe | LoRaWAN + LoRa Modem | LoRa Alliance, CE | MiP-LwMo-2C256N-EU – Dual Core |
| 32001505BUS | USA, Canada | LoRaWAN | LoRa Alliance, FCC, IC | MiP-Lw-1C128N-US - Single Core |
| 32001506BUS | USA, Canada | LoRaWAN | LoRa Alliance, FCC, IC | MiP-Lw-2C256N-US - Dual Core |
| 32001514HW | Worldwide | Hardware | N/A | MiP Hardware Only |

APPLICATIONS

Harness the power of IoT

The Internet of Things (IoT) has transformed the way that modern human lives.

Discover the main sectors in which it is possible to integrate the potential of a new MiP (Mipot IoT Protocols) wireless modules series for low power wide area network (LPWAN).



IOT SECTORS

- Smart Metering (Gas + Water + Electric metering)
- Smart Cities
- Smart Parking
- Smart Lighting
- Building management (Smart Building, Home Automation, Smart Home)
- Smart Logistics
- Waste Management
- Renewable Smart Energy System
- Smart Asset Management in the utility market
- IIoT (Industrial Internet of Things)
- Smart Agriculture
- Fleet Tracking
- Smart Mobility & Smart Car
- Oil & Gas Sector
- Healthcare Monitoring System



DEVELOPER KIT FOR MIP SERIES

The DevKits are a series of single boards for the development and test of MiP series

Equipped with 3 pin strip connectors, the kit allows easy interfacing with all LGA pads on the MiP module via jump wires or a perfboard.

The developer can use the Devkit both in **host-based mode**, connecting his own controller to the board, or **as a stand-alone product** exploiting the full potential of the MiP Series modules. The package includes a **development board** with SMA connector, a **monopole antenna** for 868 MHz and 915 MHz frequency bands and a reference sheet.

| PRODUCT CODE | COUNTRIES | DESCRIPTION |
|--------------|-------------|---------------------------|
| 30001505AEU | Europe | Developer Kit 32001505AEU |
| 30001505BEU | Europe | Developer Kit 32001505BEU |
| 30001505BUS | USA, Canada | Developer Kit 32001505BUS |
| 30001505CEU | Europe | Developer Kit 32001505CEU |
| 30001505DEU | Europe | Developer Kit 32001505DEU |
| 30001505FEU | Europe | Developer Kit 32001505FEU |
| 30001514HW | Worldwide | Developer Kit 32001514HW |





Via Corona, n.5
34071 - Cormons (GO) - Italy
Phone: +39 0481 630200

FOR ENQUIRY

mipot@mipot.com

COMPANY WEBSITE

<https://www.mipot.com>

FOR ENQUIRIES (BENELUX)

