

LR 9 Click



PID: MIKROE-6038

LR 9 Click is a compact add-on board designed for ultra-long-range spread spectrum communication tasks within the LPWAN domain. This board is based on the RA-08, a LoRaWAN module from Ai-Thinker Technology, featuring the ASR6601 system-on-chip (SoC) that combines RF transceivers, modems, and a 32-bit RISC microcontroller (MCU). This module excels with its support for LoRa and (G)FSK modulation, a frequency range of 410MHz to 525MHz, and embedded storage of 128KB FLASH and 16KB SRAM, ensuring robust and versatile communication capabilities. Moreover, it's equipped with UART and I2C interfaces for easy programming and integration and an SMA antenna connector for enhanced connectivity. This Click board™ is ideal for applications in smart metering, supply chain and logistics, home automation, and security systems, offering long-distance, ultra-low power connectivity solutions for various sectors.

LR 9 Click is fully compatible with the mikroBUS™ socket and can be used on any host system supporting the [mikroBUS™](#) standard. It comes with the [mikroSDK](#) open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this [Click board™](#) apart is the groundbreaking [ClickID](#) feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	LoRa,Sub-1 GHz Transceivers
Applications	Ideal for smart metering, supply chain and logistics, home automation, and security systems
On-board modules	RA-08 - LoRaWAN module from Ai-Thinker Technology
Key Features	Based on LPWAN wireless communication SoC, integrated 32-bit RISC MCU, supported modulations including LoRa, (G)FSK, BPSK, (G)MSK, high sensitivity, embedded flash i SRAM memory, external antenna support, UART/I2C interface, AT commands, and more
Interface	I2C,UART
ClickID	Yes
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[LR 9 click example on Libstock](#)

[LR 9 click 2D and 3D files v100](#)

[RA-08 AT Commands](#)

[RA-08 datasheet](#)

[LR 9 click schematic v100](#)

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