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INDUSTRIAL PRODUCT DATASHEET

Semtech LR2012 LoRa Plus Evaluation Kit-CN490 | Semtech | LoRa | XIAO nRF54L15

The LR2012 LoRa® Evaluation Kit, built around Semtech's 4th-generation sub-GHz transceiver, enables rapid prototyping of long-range, ultra-low-power IoT devices.

SKU	UPDATED	PRICE
100036534	2026-11-11 06:37:30	$99.00(Excl. VAT)



Overview



The LR2012 LoRa® Evaluation Kit, built around Semtech's 4th-generation sub-GHz transceiver, enables rapid prototyping of long-range, ultra-low-power IoT devices. Focused exclusively on the sub-GHz band, LR2012 delivers the best-in-class sensitivity down to -141.5 dBm and up to +22 dBm output power — at a cost-optimized price designed for traditional LPWAN applications. Designed for seamless integration into existing development workflows, the LR2012 evaluation kit is hardware-compatible with widely used platforms such as Arduino Uno, STM32 Nucleo, and Nordic DK boards.

Key Features

01 **Gen-4 LoRa Performance, Sub-GHz Focused**

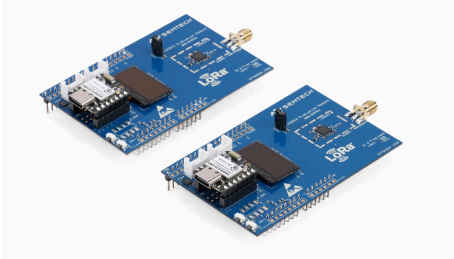
02 **Cost-Optimized for LPWAN at Scale**

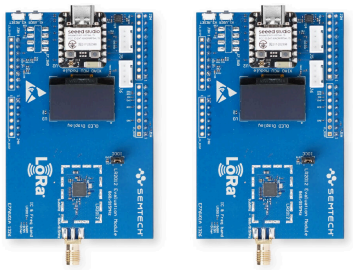
03 **Best-in-Class Energy Efficiency**

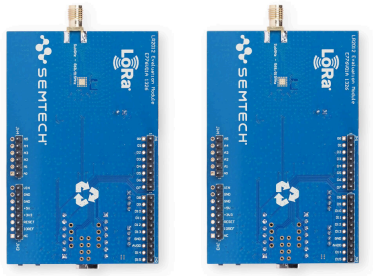
04 **Enhanced Channel Activity Detection (CAD)**

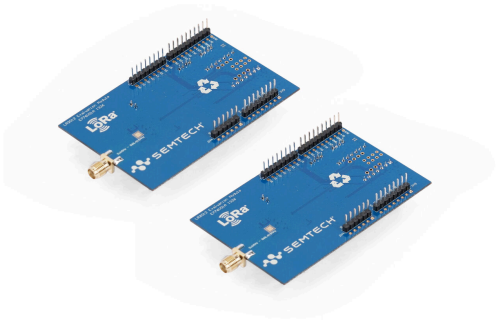
05 **Ready-to-Go for Prototyping**

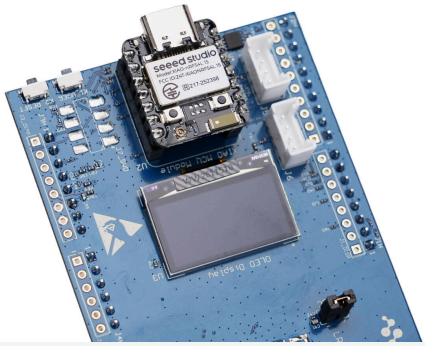
Product Gallery



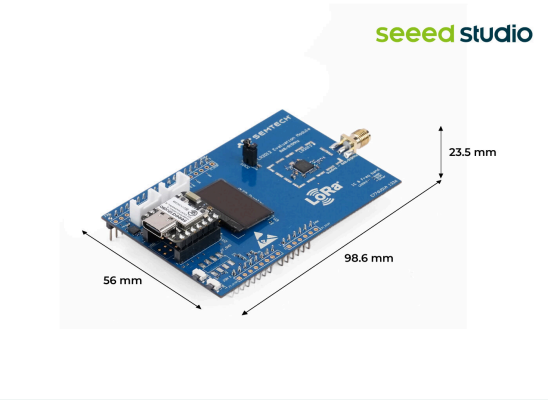




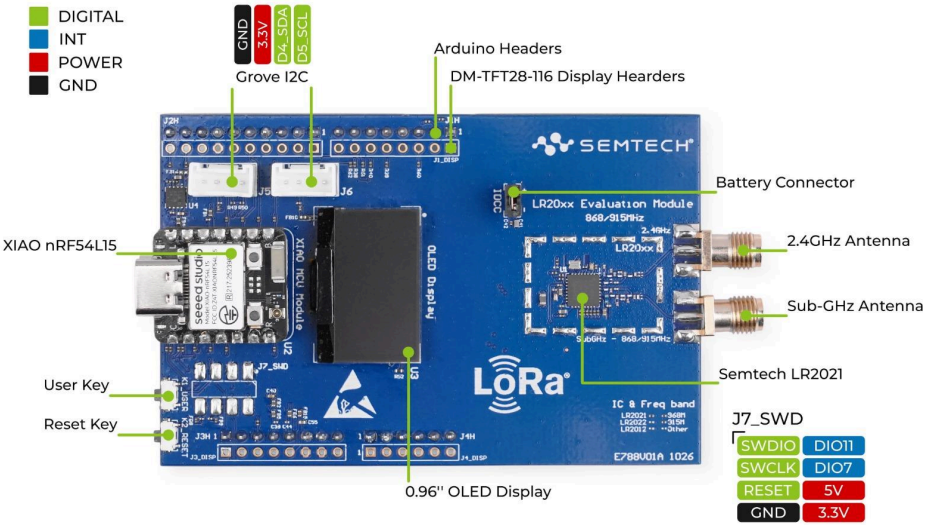


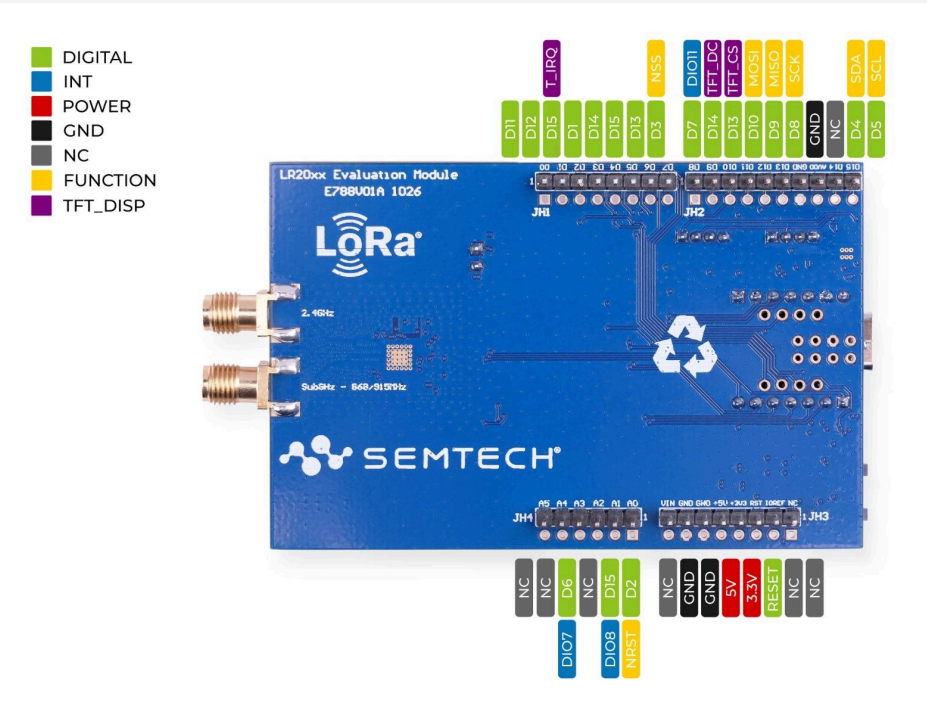





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23.5 mm
98.6 mm
56 mm

Hardware Overview





Applications

- **Smart Metering::** Industry customers have already selected the LR2012 for next-generation meter interface units — superior LoRaWAN performance, backward compatibility with legacy OOK meter infrastructure, and LR-FHSS support for scalable network capacity make it ideal for electricity, water, and gas metering roadmaps.
- **Smart Agriculture::** Ultra-long-range sub-GHz links connect soil moisture, irrigation, and environmental sensors across vast farmland, with multi-year battery life.
- **Industrial Sensing & Predictive Maintenance::** High link budget and improved interference resilience support battery-powered sensors in harsh industrial environments and extended outdoor deployments.
- **Smart City & Building::** Deep-indoor penetration for parking, lighting, and environmental monitoring nodes on LoRaWAN networks.

Resource Links

- https://www.seeedstudio.com/semtech-lr2012-lora-plus-evaluation-kit-cn490-p-7006.html
- Semtech LR2012 Datasheet
- Semtech LR2012 CN490 Expansion Board Schematic

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