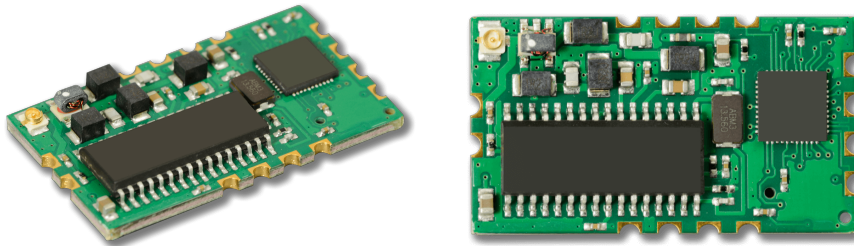


## Dwarf14 Embedded SMD Module

Art. no.:  
22000019



- For Mifare Classic/Ultralight and NTAG
- Small Footprint
- External Antenna
- NRND

### Dwarf14 Embedded SMD Module

If you want to integrate RFID technology into existing devices to check consumables, find counterfeited spare parts in a machine or identify users, you sometimes do not have the space on your PCB for a complete reader. Often you only have a few square inches of available space to place all the RFID functionality you need. For these cases, the Dwarf14 HF RFID Module is just the right product. It uses MIFARE<sup>®</sup> Classic and MIFARE Ultralight<sup>®</sup> protocols.

With a size of only 22 x 39 mm, the module sets a new standard for RFID reader miniaturization. Despite its size, the module has a performance comparable to much bigger RFID readers. With the right antenna, you can even get a read range of 80 mm.

With the use of these production-ready SMD modules, you get tested hardware and firmware in an extremely short time to market. If you need a different form factor or new features there is always the possibility for a customized module.

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## Dwarf14 Embedded SMD Module

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## Technical Specification

Operating Principle	ISO14443A/Mifare Embedded RFID Module
Operating Frequency	13.56 MHz (worldwide)
Antenna Connector	U.Fl, 50 Ohm
Output Power	250 mW
Read Range	up to 80 mm
Supported Protocols	ISO14443A (ID only), Mifare Classic, Mifare Ultralight
Antenna Connector	5V UART (115,200 Baud)
Operating Voltage	5V DC
Power Consumption	idle: 10 mA, RF on: max. 100 mA
Inputs/Outputs	8 x 5 V Input/Output (configurable)
Temperature Range	-20 Â°C to +70 Â°C
Dimensions	22 x 39 x 5 mm / 0.9 x 1.6 x 0.2 inch

## About Metratec

Metratec develops, produces and sells Radio electronics for the areas of "Identification", "Localization", and "Communication" and thus serves a variety of markets with standard products as well special solutions. Customers include OEM customers, system integrators and research facilities worldwide.

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