



Internal antenna radiation pattern



FEATURES

- Mini IoT RAIN RFID reader with USB and Wi-Fi connectivity
- UHF RAIN RFID reader/writer
 - An integrated antenna for reading tags at distances of up to one meter
 - Two RF ports for connecting additional external antennas for reading distances up to 6 m
- Wi-Fi 802.11n radio at 2.4 GHz
- USB-powered

COMMUNICATION

- One USB port for data and power
- Wi-Fi for data communication and remote management

PROTOCOLS

- MQTT(s)
- Sockets
- WebSockets
- HTTP(s) REST

The Identix DR-mini is an ultra-compact, high-performance IoT RAIN RFID reader, equipped with an integrated RFID antenna and two RF (SMA) ports for connecting additional external antennas. All antennas can operate simultaneously, with independent radio configurations, offering flexibility for multiple use cases.

Compatible with various communication protocols over network and USB, such as MQTT, HTTP, WebSockets, etc., the DR-mini allows rapid and simplified integration with different enterprise applications.

Its internal antenna features circular polarization and a high-intensity magnetic field, optimized for short-range reads in environments such as point-of-sale (POS) terminals, price-check stations, product sorting tables, and other similar settings.

The device can optionally operate in "keyboard wedge" mode (USB HID keyboard emulation), facilitating integration with systems already prepared for barcode scanners. It can also be configured to automatically decode RFID tags in the SGTIN-96 standard, converting them to the EAN-13 barcode format.

Among the DR-mini's exclusive features for retail and POS environments are the optical sensor for automatic read triggering and intelligent data-filtering algorithms, which enable fast, accurate and efficient capture of items identified with UHF RAIN RFID tags.

Technical Specifications

UHF RFID ISO18000-63 Reader/Writer

- Operating frequency: 865 MHz to 928 MHz
- Maximum transmit power:
 - DR-mini: +27 dBm; DR-mini-LT: +23 dBm
- Reading speed: >300 tags/s (M4)
- Maximum sensitivity: -73 dBm (M8)
- Integrated antenna (reconfigurable) with circular polarization, typical gain of 0 dBi in far field and magnetic field of 2 dBm/m @ 6 mm
- Two additional RF ports (SMA-F) for external antenna connection
- Data communication via Wi-Fi or USB
 - Communication protocols: MQTT(s), HTTP(s), REST, sockets, and WebSockets
 - USB: keyboard emulation (HID), RAW ASCII

General

- Wi-Fi 802.11n radio at 2.4 GHz with a maximum speed of 150 Mbps
- Integrated RGB LED and buzzer for feedback
- One USB port for communication and power supply
 - Maximum power consumption: 7.5 W at +27 dBm output power
 - E-fuse: electronic fuse for overvoltage and overcurrent protection
 - Integrated sensors for continuous voltage and current monitoring
- Integrated optical sensor, configurable for read triggering
- Weight: 100 g
- Dimensions: 116 × 60 × 12 mm
- Ingress protection rating: IP64
- Operating temperature: -20 °C to +65 °C
- Certifications: Anatel and FCC

For more information, visit

identix.com