IDRO RFID

UHF RFID Reader Embedded Antenna: IDRO900EA

FEATURES

- Global UHF Band Support, 840-960MHz
- 1 Watt max output power
- Broad support for ISO 18000-6C (EPC Gen.2) and ISO18000-6B tag vendors
- High Performance
- Upgradable firmware
- Host Interface: RS232C
- API Support

MERITS

- Industry-leading performance
- Designed for Car Parking Management / Vehicle Security
- Low Cost
- Simple integration for fast time-to-market

Product Overview

IDRO Antenna Embedded RFID Reader IDRO900EA offers a one of a kind combination of high performance and low cost. The IDRO900EA delivers the following benefits:

➢ **Superior read range** through well designed circuits that reaches up to 10 meters (depends on tags).

➢ **Superior anti-collision performance** that allows up to 100 tags per second.

➢ **Compact design** with simple and elegant features go really well with natural environments

➢ **Simple system integration** by using IDRO API, a library that simplifies protocol functions from the host system.

➢ **Firmware upgradability** through serial port that allows for future tag introductions and protocol enhancements.

➢ **Broad compatibility** support for broad vendor's tags of ISO 18000-6C(EPC Gen. 2) and ISO 18000-6B protocols.

➢ **Performance optimization** achieved through power control (13 ~ 30 dBm) at multiple or dense reader environments.

Applications

The IDRO Embedded Antenna Type RFID Reader IDRO900EA has been created specifically for several applications and use cases that share common requirements for tag support, protocol and performance. The IDRO900EA is an ideal solution for:

Application Areas
➢ Car Parking Management
➢ Vehicle security
➢ Item Management
➢ Asset Tracking
➢ Animal Tracking
➢ Access Control

Reader Type
➢ One Channel Fixed Type Readers
➢ Tag Encoders
➢ Smart-Shelves

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Software

IDRO API C

IDRO Protocol

IDRO Demo Environment

About IDRO:

IDRO Co., Ltd provides high performance UHF RFID reader and reader modules. Our UHF RFID readers are the state-of-the-art for all applications and fully compliant with the FCC rules and EPC Gen2 protocol.

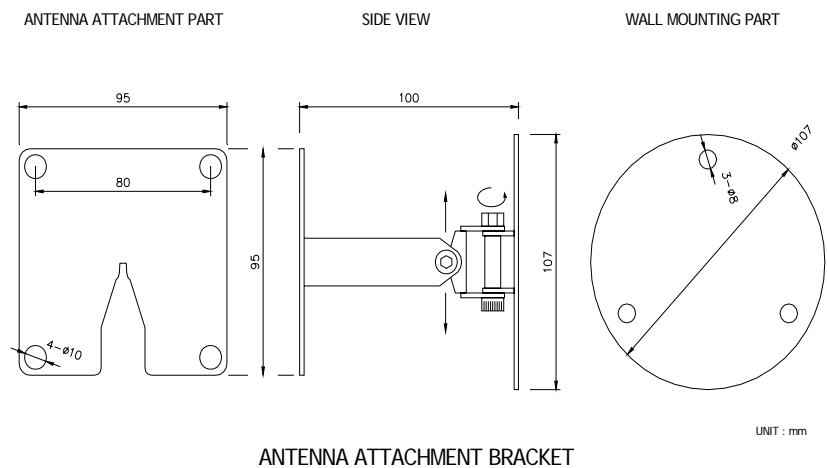**For more information:**

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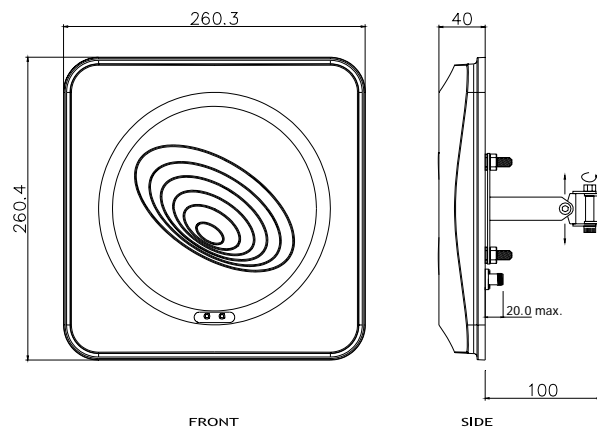
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Specification

Frequency

840MHz ~ 960MHz

Host Communication

RS232C: 9.6 Kbps

1 programmable GPIO pins

Physical Dimension

Length: 260.3mm (102.4inches)

Width: 260.4mm (102.4inches)

Height: 40.0mm (15.8inches)

Weight: < 850g (31 oz)

Environment

Storage Temperature: -20°C to 80°C

Operating Temperature: -20°C to 50°C

Regulatory Support

KCC (Korea)

Planned*: FCC 15.247, RoHS, ETSI EN 302-208 (CE), China, Japan

Air Interface Protocols

EPC C1G2 / ISO 18000-6C, ISO 18000-6B

RF Output Power

Adjustable 13-30 dBm with 1 dB steps

Power Accuracy: ±0.5 dBm

Average Current Consumption

Scan Mode: 1.3 A @ 30 dBm

Supply Voltage

5.0 VDC

Hardware Connection

RS232C(1 Tx, 1 Rx, VCC(+5V), GND)

Read Performance

Read range up to 10 meters for a single tag. Anti-collision performance up to 100 tags/second

Development Kit

The development kit for the IDRO Reader Embedded Antenna (IDRO900EA) includes all hardware and software components required to integrate UHF RFID technology quickly and easily into an application.

Hardware

IDRO900EA Reader (1ea), 5V Adapter (1ea), Serial Cable (1ea), Sample Tags (2 ea)

Software

IDRO API: C, IDRO Protocol, Demo GUI

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Physical Drawings

ANTENNA ATTACHMENT PART   SIDE VIEW   WALL MOUNTING PART

UNIT : mm

ANTENNA ATTACHMENT BRACKET

FRONT   SIDE

ANTENNA & BRACKET Ass'y