

UHF

RFLINE M30



PRODUCT DESCRIPTION

The RFline M30 is a fixed and compact all-in-one UHF RFID reader for industrial automation processes.

It has an power output of up to 30 dBm / 250 mW. The power setting can be set in 1 dB steps starting from 0 to 30 dBm. In combination with the integrated circular antenna and a gain of -8 dBi, RFline UHF M30 can achieve reading distances of up to 50 centimeters within industrial environments.

Typically this device will be used within the industrial automation at production lines and conveyor belt systems. Another wide spread application is the identification of tool attachment at construction, municipal and farming vehicles.

The RFline UHF M30 comes with a RS232 interface and a power supply of up to 10 to 24 V. This RFID device allows a flexible and fast integration into many existing applications with its easy to install cylindrical housing and standardized M12 connectors.

iDTRONIC's RFline UHF M30 supports the well known M30 SDK with demo and setup tools. The Windows based tools support all operating systems starting from XP up to Windows 10.

APPLICATIONS

- · Industrial Automation
- · Material Handling
- Tracking & Tracing
- Attachment Identification
- · Production Control

FEATURES

- · 10 to 24 V Power Supply
- · Up to 50 cm Reading Distance
- · Compact Cylindrical Housing
- · IP67
- · M12 Connector

AVAILABLE INTERFACES

· RS232

RFID OPTIONS

 UHF (EPC C1 GEN2 / ISO18000-63)



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS		
Power Supply	10-24 VDC	
Power Consumption	4 W	
Operating Frequency	UHF: 865 - 868 MHz (ETSI)	
RF Output Power	30 dBm / 250 mW. software configurable in 1 dB steps	
RF Input Sensitivity	-8251 dBm, software configurable in 1 dB steps	
Antenna	Internal	
Operating Distance	up to 50 cm*	
Communication Interface	RS232	
Connector	M12 Connector	

ANTENNA SPECIFICATIONS	
Antenna Gain	-8 dBic
Beam Width	100° / 170°
Axial Ratio	< 1.5 dB
Polarization	Circular

MECHANICAL CONDITIONS		
Housing Material	Metal	
Overall Dimensions	M30 x 2 x 91 mm	
Weight	174 g	
Protection Class	IP67	

ENVIRONMENTAL CONDITIONS		
Operating Temperature	-20 up to +55°C	
Storage Temperature	-40 up to +85°C	
Humidity	up to 95%, con-condensing	

SDK INFORMATION	
Supported OS	Windows 10, 11
Demo Software	Windows

APPLICABLE STANDARDS	
EMC	EN 301489-1:2012-04 (v1.9.21) EN 301489-3:2013-12 (V1.6.1)
Safety	EN 62368-1:2020 EN 62369-1:2010-03 EN 50364:2010-11
RoHS 2	EC Guideline 2011/65/EU and amendment 2015/863/EU, updated by 2017/2102/EU EN 50581:2012 (valid till 2024-07-07) EN 63000:2018
REACH	EU Guideline 1907/2006, updated by 2020/171/EU

SUPPORTED STANDARDS / TAGS

Standard ISO 18000-63 (EPC Class 1 Generation 2) E.g. Alien Higgs 2/3/4, Impinj Monza, NXP UCODE, etc.

*READING DISCTANCE DEPENDS ON TAG, ANTENNA AND ENVIRONMENTAL CONDITIONS.

ORDER CODES

VERSIONS	ORDER CODES
RFline UHF M30 - RS232	R-RF-UHF-232