

MPR Series

UHF M30



PRODUCT DESCRIPTION

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

It has an power output of up to +24 dBm / 250 mW. The power setting can be set in 1 dB steps starting from 0 to 24 dBm. In combination with the integrated circular antenna and a gain of -8 dBi, MPR Series 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 MPR Series UHF M30 comes with a RS232 and a TCPIP POE interface and a power supply of 10 to 26 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 MPR Series 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
- · TCPIP POE

RFID OPTIONS

 UHF (EPC C1 GEN2 / ISO18000-63)



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS		
Power Supply	1024 Vdc	
Power Consumption	4 W	
Operating Frequency	UHF: 865 - 868 MHz (ETSI)	
RF Output Power	+24 dBm / 250 mW. software configurable in 1 dB steps	
RF Input Sensitivity	-8751 dBm, software configurable in 1 dB steps	
Antenna	Integrated	
Operating Distance	up to 50 cm*	
Communication Interface	RS232 TCPIP POE	
Status Display	signal LED	
Connector	5 pin M12 A-coded male 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
UHF Multi-Purpose Reader M30 - RS232	R-MP-UHF-M30-232
UHF Multi-Purpose Reader M30 - TCPIP POE	R-MP-UHF-M30-ET/POE