



## Group

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## Description

Doc IP7030

The iP-UHF Registration Readers are available in two standard frequency versions:

Frequency	Power output (Factory set)	Typical application
869.4 MHz	40 mW EIRP	Europe, unlicensed
915.3 MHz	40 mW EIRP	RSA, USA, AUS unlicensed

The Registration Reader is used mainly for testing UHF tags and recording their factory-set 64-bit ID codes. It is connected via an RS232 cable to a PC or other device, which controls when the RF unit transmits, and records tag ID data. While the RF unit is transmitting it receives codes from in-range tags, and the decoder (the data processing part of the RF unit) filters out code repeats, so that only one occurrence of each code is output on the RS232 link. Normally one tag at a time is recorded. Depending on the PC's application software, each tag code may be time stamped and linked to other information (e.g. a name) before being stored or sent to another application.

The Reader uses version C of iPico's "Mini Radio Frequency Unit" range, which features two integrated patch antennas. The transmit antenna radiates approximately 40 mW EIRP. Power supply is 12V from a separate mains operated PSU supplied with the Reader.

### LED indications:

GREEN = RF ON.

RED Flashes rhythmically to indicate "Reader ready", and also flashes once each time a valid tag code is received.



## Key Features

- § Available for USA, European, AUS and RSA spectrum allocations
- § RF power output : 40 mW EIRP fixed
- § Read/Write iP-X4 (EM4422), -X7 (EM4432) tags; Read EM4022, and all iP-X tags (EM4222, 4422, 4232, 4432)
- § Write characteristics: speed =16 kb/sec, modulation = -36 dBc
- § Real time clock (RTC)
- § IP-54 enclosure and connectors
- § Software, hardware and diagnostics control
- § Built-in test and diagnostics
- § Valid ID & status outputs
- § Bi-colour LED indicator indicates RF ON/OFF, valid code received, slow flash = "Reader Ready"
- § Optional TX On/Off control input
- § 5 - wire Wiegand interface optional

## RFU Specifications

Power supply	12V at 650 mA max
RF Power output	Factory set to 40 mW EIRP
Communication	Binary or ASCII RS232 with programmable baud rate and flow control
Data processing	When the RF is ON and tags are illuminated, the tag data is filtered to remove code repeats, and each unique code is transmitted once only. It needs to be captured externally by a PC or external controller. When the RF is switched OFF and ON again, the tags again transmit their codes, and all unique codes will again be transmitted via the RS232 link.
Electrical interface	Power: standard power socket for supplied 12 VDC PSU. Data: DB9 male, RS232
Environmental	Operating temperature range: -10 to +60C, Storage temperature range: -20 to +85C Humidity: 5 to 95 % non-condensing, IP rating: IP 54, UV protection: Yes
Physical	Dimension: 200 mm (L), 100 mm (H) max, 155 mm (W) Weight: Approx.TBD
Mounting	
Reader Approvals (using this RFU)	Pending

## Ordering Information

Part number: iP-X URDR-RGvC-rff-0.04-RW  
rff: RF frequency in MHz, 915.3 or 869.4  
RW = Read/Write