impro technologies®
ACCESS CONTROL

Impro (QR)
QUAD RECEIVER

Product specification
CATALOGUE

The Impro (QR) Quad Receiver is a compact, lightweight, 4-Channel, 433.92MHz, RF Receiver - and part of the Impro IXP20, IXP220, IXP300 or IXP400, and Scan Range of access control system products.

The receiver is designed for use with the IXP220 Controller, IXP20 Controller, Impro (iTRT) Intelligent Twin Reader Terminal, the Impro (MfT) Multi-function Terminal and the Impro (TA) Time Attendance Terminal.

Entry-level customers should take note that the Quad Receiver also caters for small-scale private/commercial access control installations when used with the UniScan/FlexiScan Controllers.

The Quad Receiver accepts 433.92MHz transmissions (either OOK or FSK modulation schemes) from the Hand-held Impro Quad Transmitter (TRK900-1-1-GB-XX,)

RF Tag information is decoded within the Quad Receiver and then sent to the respective Terminal or Controller, for access control purposes.

Intended for indoor or outdoor use, the receiver's electronics are conformal coated and contained in a black, glass-filled Nylon housing.

The HRR901-0-1-GB-XX variant is designed for use with an external antenna (via SMA connector), where flexibility is needed for special requirements.



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Key Features

- Aids in vehicular traffic or domestic garage door or gate control
- Suitable for outdoor installation
- Diagnostic RSSI (Received Signal Strength Indicator) LEDs for trouble shooting.
- Internal Antenna variant for a cost effective solution
- RF SMA connector variant for an external antenna, for sites with special requirements

Impro (QR) Quad Receiver

HRR900-0-1-GB-XX HRR901-0-1-GB-XX

Physical Specifications

Length	:	84 mm (3 in)
Width	:	114mm (5 in)
Height	:	34 mm (1 in)
Approximate Weight	:	100 g (3.5 oz)
Housing Material	:	Glass Filled Nylon (PA6)
Colour	:	Black

Environmental Specifications

Operating Temperature	:	-25°C to +60°C (-13°F to +140°F)
Storage Temperature	:	-40°C to +80°C (-40°F to +176°F)
Humidity Range	:	0 to 95% relative humidity at +40°C (+104°F) non-condensing

Approvals

CE Approval	:	CE Approved
Dust & Splash Resistance	:	The Impro Quad Receiver is designed to work in an indoor or outdoor environment similar to IP55. The Receiver is, therefore, resistant to water (refer to the section Mounting the Quad Receiver in the Installation Manual).
Drop Endurance	:	2 m (7 ft) drop (in packaging)

Electrical Specifications

Receiver

Sensitivity	:	-110 dBm
UHF Carrier	:	433.92 MHz
Modulation Type	:	OOK and FSK

Antenna

HRR900-0-1-GB-XX	:	Integrated Helical Antenna
HRR901-0-1-GB-XX	:	SMA connector (50 Ohm) for external antenna

Power

Input Voltage Range	:	11V to 15V DC (Polarity Sensitive)
Current	:	60mA
Power	:	0.7W

Serial Transmission

Distance	:	150 m (164 yd)

Related Information

For extra information relating to this product refer to the:
Hardware Installation Manual (HRF300-0-0-GB-XX)

Ordering Information

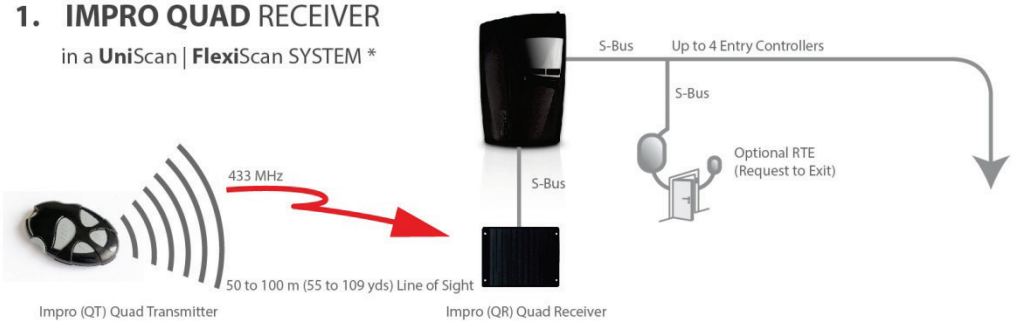
Order the Impro (QR) Quad Receiver using the following Part Numbers:

HRR900-0-1-GB-XX:- Internal Antenna
HRR901-0-1-GB-XX:- SMA connector for External Antenna

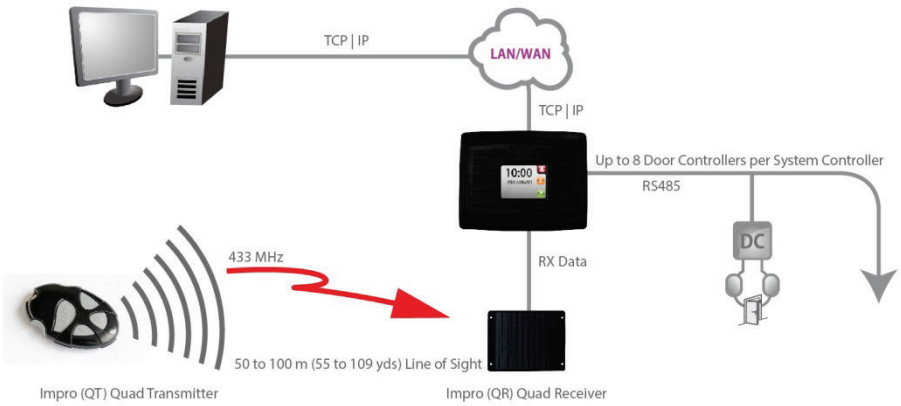
Warranty Details

This product conforms to our Warranty details on www.impro.net

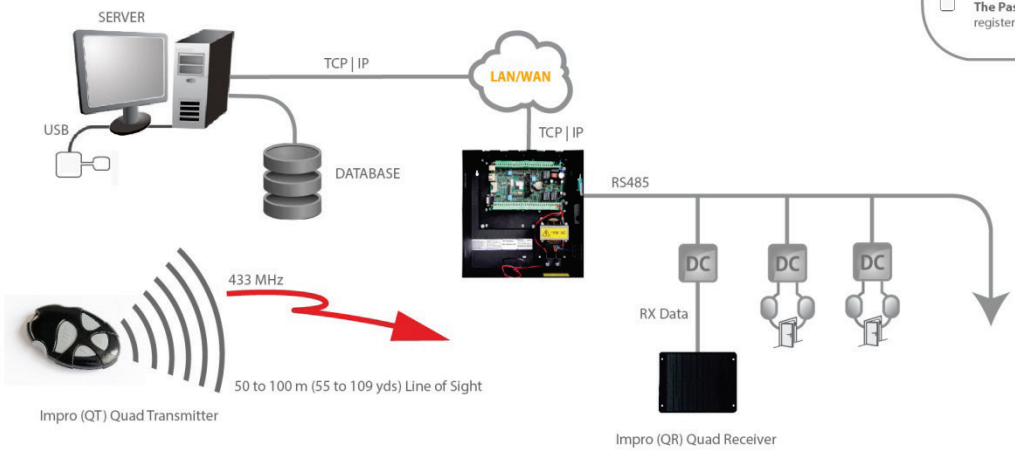
1. IMPRO QUAD RECEIVER
in a **Uni**Scan | **Flexi**Scan SYSTEM *



2. IMPRO QUAD RECEIVER
in an **IXP**20 SYSTEM **



3. IMPRO QUAD RECEIVER
in an **IXP**220 OR **IMPRONET** SYSTEM



KEY for diagram

System Controllers - selection
The Impro Quad Receiver can be used within the **UniScan | FlexiScan, IXP20, IXP220 & ImproNet Systems.**
* Diagram shows entry level S-Bus UniScan|FlexiScan System.
** Diagram shows the Web Interface IXP20 Controller (ISC920).
*** IXP220 Controllers do not allow enrolling of tags via the access nodes, for this reason a SECOND Quad Receiver connected to a tag registration reader is necessary for enrolling new Quad Transmitter tags.

Door Controllers - selection
In an IXP20 System, the Impro Quad Receiver is compatible with the following Door Controller:
- Impro iTRT

In an IXP220 or ImproNet System, the Impro Quad Receiver is compatible with the following Door Controllers:
- Impro iTRT
- Impro TA

Door Reader - selection
UniScan | FlexiScan Systems:
- Impro (SKR) Scan Keypad Reader

UIX20, IXP20 and ImproNet Systems:
- 125kHz Antenna Readers
- Biometric Readers
- MiFARE multi-mode Readers (13.56 MHz)
- Wiegand Readers
- Vehicle Entry Long Range Readers
- Extended Range Readers
- InfraRed Readers
- Dropbox Visitor Tag Readers
- Time and Attendance Readers

Tag Registration Reader
The Passive Tags inside the Quad Transmitters are registered on a 125 kHz Tag Registration Reader

This Product Specification Catalogue applies to the Impro Quad Receiver models: HRR900-0-1-GB-XX and HRR901-0-1-GB-XX. (The last two digits of the Impro stock code point to the issue status of the document or product).			
HRR350-0-0-GB-01	Issue 02	April 2013	IMPRO\Impro QR\Product Specification Catalogue\LATEST ISSUE\QuadRec-psc-en-02.docx