



# 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 Access Portal, IXP20, IXP220, IXP300 or IXP400, and Scan Range of access control system products.

The receiver is designed for use with the Access Portal (and Access Portal LITE) system's Wiegand Reader Module, 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.

Antenna selection option allows for the choice of internal/external antenna at installation.





## 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.

### Impro (QR) Quad Receiver

HRR900-0-1-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	: PENDING
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

### Selectable Antenna

Select between the internal antenna or an external antenna (SMA socket)

### Power

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

### Serial Transmission

Distance	: 150 m (164 yd)
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## 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 Number:

HRR900-0-1-GB-XX

## Warranty Details

This product conforms to our Warranty details on [www.impro.net](http://www.impro.net)

Quad Receiver installed in different Impro Systems

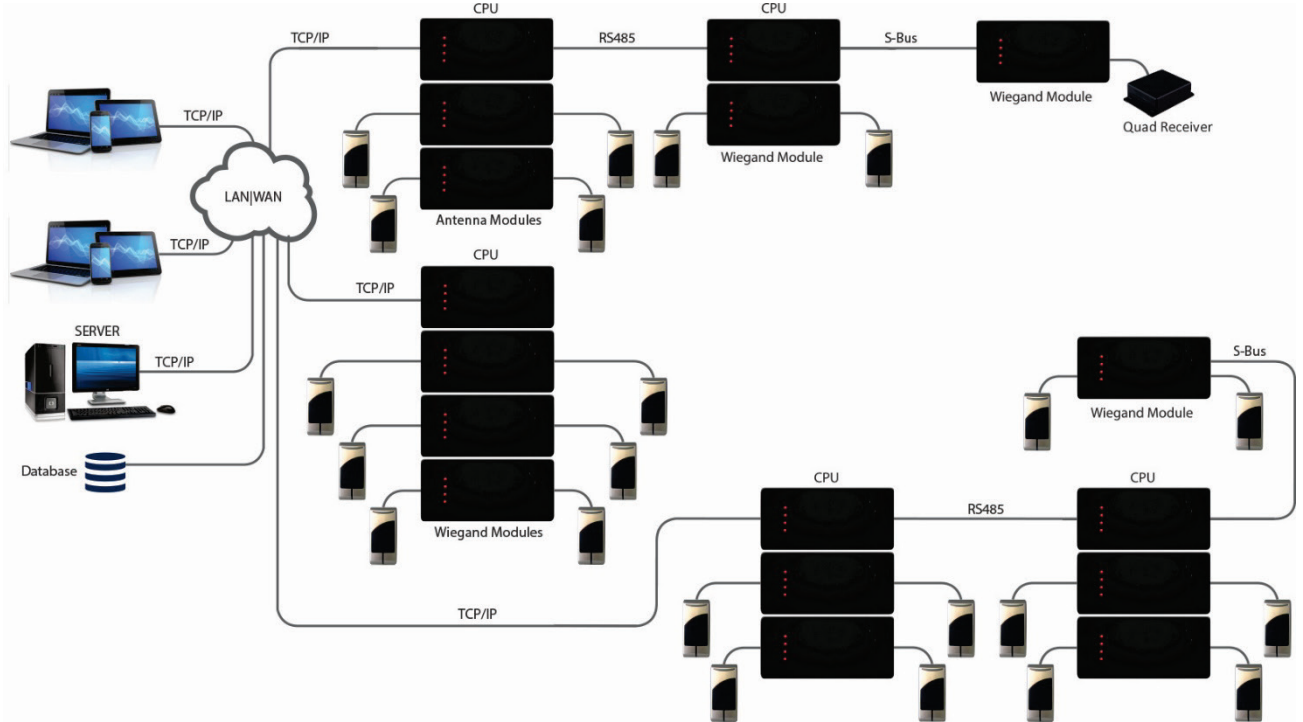


Figure 1: Impro (QR) Quad Receiver in an Access Portal Pro System

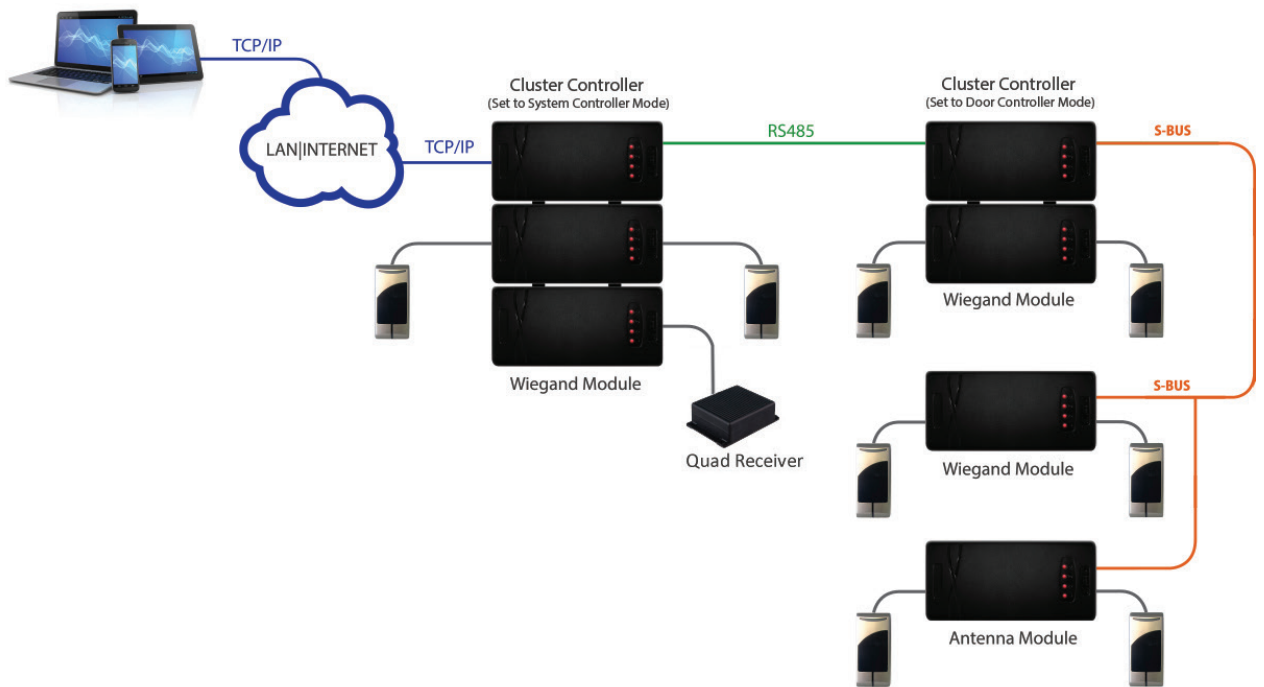
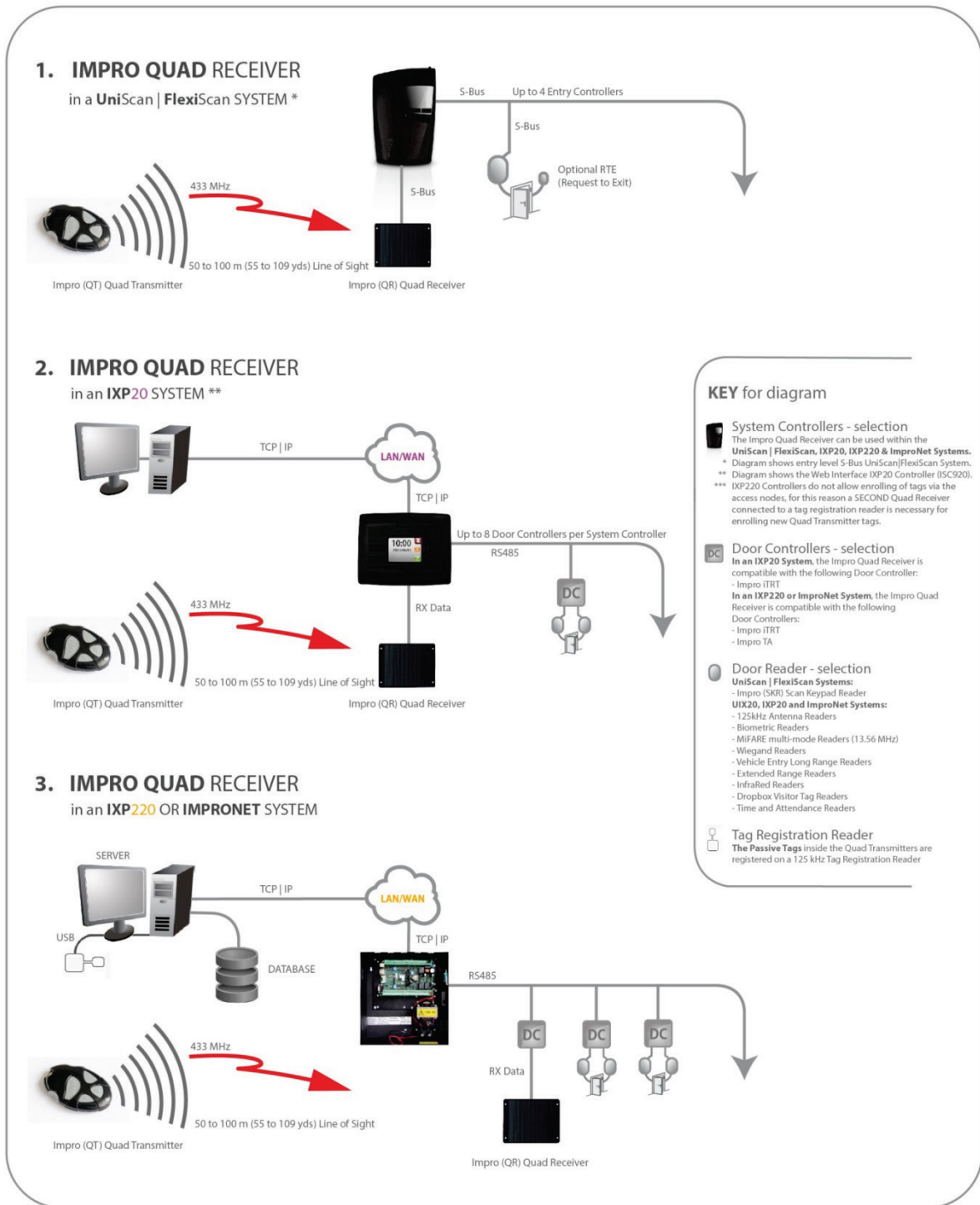


Figure 2: Impro (QR) Quad Receiver in an Access Portal LITE System



**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 IA
- 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

**Figure 3: Impro (QR) Quad Receiver featured in the Scan Series, IXP20 and IXP220 systems**

This Product Specification Catalogue applies to the Impro Quad Receiver HRR900-0-1-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-03	Issue 04	January 2020	IMPRO\Impro QR\Product Specification Catalogue\LATEST ISSUE\QuadRec-psc-en-04.docx