



# Trolley Scan (Pty) Ltd

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## CATALOGUE for UHF RFID systems Readers

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### Compact Fixed Reader

Mains operated (110volt/220volt)

Bistatic antenna system

Reading ranges up to 13 meters for  
transponders when attached to metal and  
up to 30 meters with long range Ecotags

RS232 data output

Datasheet - <http://trolleyscan.com/datacomp.html>



### Portable reader( long range)

Internal battery operated

Up to 11 hours operation on point and shoot  
basis

Charging from 110/220 volt

Reading ranges up to 10 meters for  
transponders even attached to metal

RS232 data output

Datasheet at <http://trolleyscan.com/dataport.html>



## Transponders

### Ecochiptag

80mm by 37 mm creditcard sized

Waterproof

200uW RF operating sensitivity

Read only

Unique data number factory preprogrammed

Datasheet at <http://trolleyscan.com/dataiso.html>



### Laundrytag

- 160mm long thin wire
- Waterproof
- 1000uW RF operating sensitivity
- Read only
- Unique data number factory preprogrammed
- Datasheet at <http://trolleyScan.com/dataLaun.html>



### Ecowoodtag

- Specifically designed for attachment to wooden objects such as pallets, trees and furniture
- Waterproof
- 400uW RF operating sensitivity
- Read only
- Unique data number factory preprogrammed
- Datasheet at

<http://trolleyScan.com/dataWood.html>



### Long Range Ecotags

- Special long range tags developed for RFID-radar but also suitable for RFID readers
- 5uW RF operating sensitivity.
- 25 to 30 meter operating range
- Read only
- Unique data number factory preprogrammed
- Datasheet at <http://trolleyScan.com/dataLrt.html>



### Small systems (reader with transponders)

- Complete operating system
- Add mains power and connect to computer
- Reader with 100 transponders
- Can be supplied with fixed or portable readers
- Additional transponders available
- Combinations of Ecochiptag, laundrytag and Ecowoodtag can be provided
- Datasheet at <http://trolleyScan.com/isosys.html>



### Software (optional)

Trolley Scan products do not need special software to operate - just plug in power and a computer and you have a working system.  
Trolley Scan have developed optional software products to interface Readers and Radars to Lans, databases and various applications

## OEM components

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### Processor module

Contains synthesizer, receiver, data processor, computer communications and modulator

Operates on 12 volts at 250mA

Datasheet at <http://trolleyscan.com/dataoemr.html>



### Power amplifier

Provides power stage between synthesizer/modulator and transmit antenna.

24 volt versions

Boosts power up to 4 watts

50 ohm impedance

Datasheet at

<http://trolleyscan.com/dataoema.html>



### Patch antenna

8dBi

Operating frequency 860Mhz to 930MHz

50 Ohm impedance

Linear polarization

One each used for receive and transmit functions in bistatic systems

Datasheet at <http://trolleyscan.com/datapatc.html>



## General specifications

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Operating frequency	860Mhz to 960Mhz factory programmable
Operating bandwidth	10 khz
Protocol type	Tag talks first
Modulation of energising field	Effective carrier wave
Multiple transponders	Up to 500 in field at a time
Reading rate	Up to 70 per second
RS232 baud rate	9600baud
Data encoding	9 Ascii digit

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## An RFID technology that can also measure exact position

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### RFID-radar

Measures identity and location of transponders in 2 dimensions

Measures range accurate to 0.05 meters

Operating range up to 100 meters depending on transponder

10 kHz operating bandwidth

Identify, locate and track up to 100 transponders in a zone, reporting positions at 1 second intervals

Makes up to 10000 range measurements per second

Low RF interference

Works with all Ecotag type low cost transponders

Tag talks first protocol.

Datasheet at <http://www.rfid-radar.com>



Trolley Scan was founded 13 years ago and is known as one of the leaders in the development of UHF RFID systems. It currently supplies UHF systems to users in 46 countries.

Trolley Scan be contacted at

<http://trolleyscan.com>

OR

<http://rfid-radar.com>