

# LR100 Gen 2

## Integrated Long Range UHF RFID Reader



## LR100 Gen 2

The LR100 RFID reader is a rugged IP65 UHF reader for outdoor applications with integrated antenna. This is a high performance industrial-class reader that provides all of the RFID control functions required to power and communicate with passive RFID tags. It has a long read range of up to 20m.

The reader has 2 RF channels and two internal antennas. The following options are possible:

- a) Use both channels for powering both internal antennas. The internal antennas are linear polarized, one in the horizontal plane and other one in the vertical plane. By using both polarisations it is possible to read tags independent of their orientation and with 3dB better performance than using a circular antenna.
- b) Use one channel for the internal antenna and the other for an external antenna.

The LR100 is used in the following applications:

- Tolling
- Parking and Access control
- Weigh bridge automation



### Features

- ▶ Support for EPCglobal Gen 2 (ISO 18000 6C) tag protocol with anti-collision.
- ▶ Reads vehicles travelling up to 160km/h
- ▶ One external antenna port
- ▶ Two Linear Polarised Antennas with 9dBi gain each
- ▶ RF output is 30dBm (1W)
- ▶ Designed for fixed installations
- ▶ Designed for outdoor applications, IP65
- ▶ Ethernet Interface, Optional WiFi
- ▶ Uses Linux operating system
- ▶ Supports user applications on the reader
- ▶ Uses Thingmagic RFID reader module

## RFID Protocols

ISO18000-6C (EPC Generation2)

## Electrical Specifications

FCC and ETSI compliant: Support for full 860 to 960 MHz UHF RFID carrier frequency range to accommodate worldwide spectrum regulations

Transmitter power output: Independently settable read and write transmit levels, adjustable from 5 dBm to 30 dBm (1W) with an accuracy of +/- 1 dBm

RF approval: FCC Part 15 Class B and FCC Part 15 Class C  
ETSI EN 302 208  
ICASA

Operating voltage: 12-30 VDC

Operating current: ≤2000mA

## Physical

Height: 360mm

Length: 260mm

Width: 100mm

Weight: 1.9 kg

## Environment

Operating Temperature: -20°C to +60°C

## Ordering Information:

Part Number: RFID-LR100

## Information and Sales:

[www.techsolutions.co.za](http://www.techsolutions.co.za)

[sales@techsolutions.co.za](mailto:sales@techsolutions.co.za)

## The Ideal Reader for:

- Vehicle Identification
- Tolling
- Pallet Tracking
- Access Control
- Asset Management
- Asset Tracking
- Parking

