



LR 920
Onboard weighing system
for frontloading garbage trucks



LR 920 THE ONBOARD WEIGHING SYSTEM FOR FRONTLOADING GARBAGE TRUCKS

With ever increasing pressure to remain competitive, the solid waste transport industry is looking for ways to retain profitable customers while improving operational efficiency and reducing transport costs. Haulers can no longer afford to allow unprofitable customers to be subsidised by their more profitable ones. To improve efficiencies, many operators are trying new technologies to integrate the onboard information systems on their trucks with head office information. The LR920 Bin Weighing and Auditing System was developed to help address these issues and can be installed on all makes and models of front-loading solid waste haulage trucks. The LR920 automatically measures the net weight of the bin as it is emptied. The bin weight and other information can be printed in the truck using the optional Loadrite LP950 printer or sent electronically to a separate onboard computer. The

data can also be logged in the truck using the Loadrite MMS data capture system (LD940), or transmitted to head office through a wide area network (WAN) system. Loadrite provides a simple communication interface and software protocol to enable data to be sent to any external device.

On top of the new climate of competition is the regulatory environment, where public safety and liability concerns underlay a trend to toward more enforcement of overloading regulations. To help prevent overloading, the net weight of each bin can also be added to a run total, so that the driver can monitor the total weight on the truck.

Keeping the weight on the truck under its legal capacity also helps to minimise maintenance costs.

KEY FEATURES

- Weighing System for frontloading garbage trucks
- Long total: per day, week or months
- Short total: per load or day
- Individual weights with time and date
- Data fields: up to three user definable numeric fields for details such as: Customer Name, number, bin size
- Auto add mode: automatically adds net weight to the total every time the bin is emptied
- Recall: Recall and display last lift
- Data Analysis
- Self Diagnostics
- Simple integration to customer's onboard computers (like Victor, Swift, PTS etc.)

KEY BENEFITS

- Reduce wear and tear on trucks
- Monitor efficiently waste collection cost
- Reduction of trips to landfills without overloading truck
- Eliminating overloading fines
- Provide indicative weights to customers
- Data integration into onboard computers
- From 1% accuracy



LR920™ WEIGHING SYSTEM OVERVIEW

Accuracy under defined conditions	from 1%
Weighing Range	20kg to 2,500kg
Max Capacity	5,000kg
Supply Voltage	12 to 32 Volts DC
Supply Current	160mA typical, 350mA max
Transient suppress	Automatic; exceeds relevant SAE specifications for DC automotive power
	Calibration and Back-Up Data is stored in a permanent memory and is not affected when the main power is turned off.
Serial Communications	RS232 to printer, data logger, modem or onboard computer

DISPLAY / KEYBOARD

Display	Backlit LCD
Keyboard	20 backlit keys including numeric and special function keys
Physical dimensions	170mm (w) x l 270mm (l) x h 90mm (h)
Protected	IP54

FEATURES

Load sensor options	Two load sensors are available to suit different truck types and applications
Docket printing	Proof of collection and weight
Commissioning test	Verification that the weighing system is installed correctly and performs at the time of installation according to the customer's expectations
Data transfer options	Range of options to transfer the weighing data to modem, data module, onboard computer etc.
Auto Set-Up	For customers with larger fleets and regular purchases this features guarantees a consistent set-up of the indicator and features
Diagnostic Functions	The indicator provides an in-built diagnostic tool to check the sensors and other critical

LR920™ WEIGHING SYSTEM OVERVIEW

How it works

The LR920 measures weight of the bin as the bin is raised and lowered. The indicator converts this into a weight reading and displays the value.

An electronic trigger device mounted on the lift arms ensures that the weight measurements are taken at the same position each time.

The weight of the forks and arms are zeroed out when the system is calibrated so that only the weight of the payload is displayed. When the Nett (contents) weight of a bin is displayed, the driver can add it to a total.



LR920™ LOAD SENSORS

The LR920 weighing system is available with two significantly different load sensors:

- Load cells
- Strain gauges

Both systems have their advantages, depending on the application and customer requirements.

- **Strain gauges** - The strain links are installed on the lifting arms and measure the deflection on the arms when a bin is lifted.



- **Load cells** - The load cells are installed between the forks and the lifting arms. They measure the vertical forces directly applied to the forks giving an accurate weight signal to the indicator. Load cells provide the most accurate weight measurement.





LOADRITE® SERVICE

Systems

- Factory fitted or retrofit on-site
- Integration into external onboard computer systems
- Cooperation with partners for RFID, GPS and OBC,

Technical Support

- Permanent service contract
- Individual operator and workshop training through LOADRITE® distributors

Accuracy

Integrated weighing systems for frontend loaders are specifically designed for waste and refuse collection vehicles.

The LR 920 System provides continuous and precise weight information for payload control and operational efficiency to accuracies of from 1% depending on the operating conditions and the installation.

Trade Approval

The LOADRITE® LR 920 system is NOT 'LEGAL FOR TRADE'. The system is designed and produced to give an approximate weight measurement only.

Each country or state may have different rules on the definition of LEGAL FOR TRADE. Is it important that the installer of the equipment understands these rules and advises the purchaser appropriately that the LOADRITE® LR 920 system is NOT approved as 'Legal for Trade'.

The legal for trade approval will add significant cost to the system as well as maintenance cost for the operator.

Satisfied customers

LOADRITE is a global market leader for onboard weighing systems. All major waste management provider in Australia and New Zealand trust LOADRITE® to provide the weights for their commercial garbage and recycling collections.

Why LOADRITE®?

- Market leader in Australia and New Zealand for weighing systems on frontloading garbage trucks
- Developed for rugged environments
- Dedicated Loadrite distributors
- Accurate and reliable weighing system
- 30 years of experience with onboard weighing systems
- Global company with local support

Frontlift Weighing System



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