CLM600 - Cordless Load Management system

By

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System Features

The **WLM600** is a fully digital precision cordless load cell / pressure transducer management system. It uses the latest radio transmission technology on the sender modules for sustainable low maintenance operation. ( No harness between load cells/pressure transducers ) Utilizing the **WLM600** assists the driver and loading operator to not only prevent overloading but also optimize payload delivery.

All load data per axle is available on our data base on the web site.

Speed and location of the truck is available.

An accelerometer to flag at harsh breaking and recorded data regarding the movement of the truck for the last 10 seconds before impact or roll over.
System Features

- **Low Maintenance**
  - The cordless principle of operation ensures sustainable operation requiring very little maintenance.
  
  - There are no cable connections between the trailers and the driver’s cabin.
  
  - Not sensitive to moisture which effects the consistency of the scale.
System Features

• **Precision**
  • The system delivers accuracy of ± 1% and allows the operator to consistently load within a window of maximum profitability.
System Features

• **Technology**
  • The very latest technology is implemented to provide a robust system that is reliable in all operating and weather conditions.
System Features

- **Intelligent**
  - Firmware updates and system diagnostics takes place over the air, clamping downtime to a minimum.
  - Customised wi-fi link allows interrogation of the load data with any android smart device when standing next to the truck.
  - Calibration and taring is done from the smart device via the wi-fi link. (No adjustments to be made on complex keyboard displays)
  - Any fault on the systems will set a flag on our database for early warning and location of the error.
System Features

- Wi-Fi
  - The system can be interrogated by means of any modern smart device including phones and tablets. Interrogation functions include monitoring of individual load cells and calibration.
System Features

• **Online Telemetry**
  • GSM/GPRS is standard on the system making the payload data available for third party software and coupled with the system’s built in GPS also provides location and speed data.
The Control Unit has the built-in functions to transmit the weight, speed, and GPS location data via GPRS to third-party software.

Display Unit
The Control Unit processes the data from the Load Cell Modules and displays the Gross, Nett, and Axle weight on the LCD Display.

Load Cell Modules
The Load Cell Modules convert the analogue signal from the Load Cell and transmit the data wirelessly to the Control Unit. The Control Unit is capable of connecting with up to 18 Load Cell Modules.

Wi-Fi Connection
The end user can easily interrogate each load cell module and calibrate or Tare the system using any smart device.

Thermal Printer (Optional)
At the push of a button, the printer prints the current Gross, Nett, and Axle weight along with the GPS coordinates and time.
System Functional Description
(Display Unit in CAB)

DISPLAY COLOUR CHANGE

- **NORMAL DISPLAY**: AMBER
- **ON LOAD**: GREEN
- **OVER LOAD**: RED
System Functional Description
(Sender Modules)

- TRANSMIT LOAD CELL DATA TO CONTROL MODULE
- COUPLE DIRECTLY TO ANY INSITU LOAD CELL OR PRESSURE TRANSDUCER INSTALLED.
- MOUNTED CLOSE TO LOAD CELL OR PRESSURE TRANSDUCER
- COMPLETELY INCAPSULTATED WITH TWO CHANNELS.
- PRESSURE TRANSMITTER COUPLES DIRECTLY TO THE MODULE
System Functional Description (Pressure Transducer)

- MEASURES PRESSURE DIRECTLY PROPORTIONAL TO APPLIED LOAD
- DIRECTLY COUPLED TO SENDER MODULE WHERE DATA IS PROCESSED AND TRANSMITTED TO THE CONTROL UNIT
- T INTO THE AIR SUSPENSION SYSTEM PER AXLE GROUP.
- OUTPUT OF THE TRANSDUCER IS SIMMULAR TO A LOAD CELL OUTPUT.
System Functional Description (Control Unit)

- The control unit is enclosed by a robust IP67 polycarbonate enclosure.
- All the processing is done in the unit.
- The control unit receives transmitted data from sender modules and displays the weight data on the cab display unit.
- The Control unit transmits the Location (GPS), Speed, Weight data to our remote server for storage.
System Functional Description (Control Unit)

- The unit comprises the following
  - 10-24V Dc Supply
  - Wi-Fi
  - Wireless module (Load Cell Module communication)
  - Thermal Printer. (Optional)
  - GPS
  - Accelerometer
  - LCD (Display)
  - Robust Polycarbonate enclosure
  - GSM/GPRS