



## LM OG-RF

### Electronic preset meter with ZigBee® technology for RF oil management system



#### Features

- Oval gear driven meter (LCP gears)
- Durable and lightweight
- Large, easy-to-read LCD display
- Totalization in liters and gallons
- Dispensing measurement in liters, quarts, pints, gallons
- Dispense top off feature
- Unauthorized dispense lock out feature
- Max. totalizer number: 99,999 gallons or liters
- Max. dispense volume: 99,999 units
- Max. preset volume: 999 units
- Calibration factor for different fluids
- Changeable units of measure
- Total and resettable total
- Minimum 20,000 cycles on battery life
- Low battery indicator
- Low battery safety lock out feature
- Ability to save settings if power interrupted
- Uses four standard AA batteries
- Inline swivel standard with all meters
- Automatic shut-off at preset amount
- Emergency electrical override
- Precision control valve operation

#### Description

The RF oil management system consists of an A/C powered keypad and battery-powered RF-radio equipped meters. The system has been designed to offer greater control over the dispensing of fluids with significant reductions in installation costs and the associated hardware common to most hard-wired systems today. Dispense information and authorization is communicated from the keypad to the meter with dispense information being communicated back to the keypad via 2.4 GHz direct sequence spread spectrum radio communications.

The RF meter uses four replaceable AA batteries and is calibrated at the factory. The meter can also be recalibrated easily in the field for a fluid of different viscosity.

The RF meter improves the security with a self-healing redundant mesh network.

#### Applications

The LM OG-RF meter is designed specifically to meter and dispense bulk fluids for servicing automobiles, trucks, buses, construction equipment and similar applications. Its lightweight, rugged and shock-resistant design with a comfortable grip is ideal for dispensing motor oils (S.A.E. 5-50), gear oils (S.A.E. 80-240), automatic transmission fluid, antifreeze (Ethylene Glycol) solution, and hydraulic fluid.

Typical applications include fleet maintenance shops, industrial assembly, quick lube facilities, dealerships construction and mining equipment, general automotive service centers, specialty service and repair shops.

\* ZigBee® is a trademark of ZigBee® Alliance, Inc.

## Operation

The RF meter is equipped with a RF module to communicate with a fluid management system keypad to get authorization and dispense information.

Once a work order has been entered at the keypad, the operator simply pushes the RESET button on the meter to start communications between the meter and the keypad. The meter receives authorization from the keypad to unlock, along with the dispense batch quantity. When the trigger is pulled, the preset batch quantity dispenses. The meter automatically shuts off when the dispense batch quantity has been reached.

A top off feature allows additional fluid to be dispensed and tracked after the batch quantity has been dispensed.

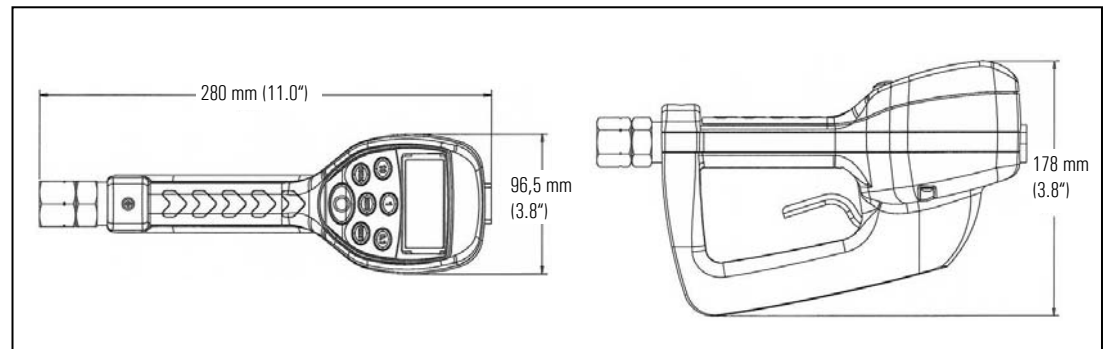
Upon completion of the dispense, the operator presses the RESET button and the meter locks, prohibiting any unauthorized dispense of fluid and the dispense quantity is sent to the keypad.

## Technical data

Maximum flow*	35 l/min (10 GPM)
Minimum flow*	1 l/min (0,25 GPM)
Operating pressure (maximum)	100 bar (1450 psi)
Operating pressure (minimum)	0,35 bar (5 psi)
Operating temperature (maximum)	50° C (120° F)
Operating temperature (minimum)	-5° C (20° F)
Accuracy / Oils	+/- 0.5%
Accuracy / Antifreeze	+/- 1.5%
Viscosity	Up to 2000 mPas
5-digit LCD display	Liters, quarts, pints, gallons
Inlet an outlet connections	½" BSP (½" NPT)

\* Tested with DTE-25 motor oil at ambient temperature. Min.-Max. flow range will vary with fluid viscosity.

## Dimensions (in mm)



FCC ID: S4GEM35XB  
FCC CERTIFIED, PART 15, SUBPART C

This device complies with part 15 of the FCC rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



CONTAINS IC: 8735A-EM35XB