

EMR⁴

ELECTRONIC METER REGISTER SYSTEM

CLASS 1 DIVISION 1 and UL/ATEX/IECEX CERTIFIED

REDEFINING FUEL TRANSFERS



► **AUTOMATION OF DATA TO ELIMINATE LOSS**

EMR4 ensures that capturing and transmitting transaction data is seamless and simple. Automated data capture, whether direct from the EMR4 or via wireless with DataLink, guarantees the integrity of all delivery data and reduces loss due to antiquated and manual processes.

► **VERSATILITY TO MAKE INTEGRATION SIMPLE**

The EMR4 was designed to simplify operations for its users. With multiple communication ports, programmable relays, pulse outputs, temperature compensation, On Board Computer (OBC) commands for remote control, and much more built standard into every register, EMR4 provides the versatility required for integration into any type of application.

► **SECURITY TO KEEP ASSETS & OPERATIONS SAFE**

EMR4 offers the necessary security to keep your fueling assets safe. With a proprietary operating system and optional settings to prevent unauthorized access, the EMR4 eliminates tampering and theft and keeps track of every drop of fuel. Until authorized by built-in password protection or through a peripheral security device, EMR4 will not allow a delivery without proper authorization, protecting your bottom line.

► **FOR ALL COMMERCIAL AND INDUSTRIAL FUELING APPLICATIONS**

The EMR4 is designed to be installed or integrated with any meter as a custody transfer approved electronic meter register for mobile/truck and stationary bulk fueling. The EMR4 system is comprised of two separate components:

1. Display Head - Installed on the meter or remotely / panel-mounted and driven by an external pulser
2. IB Box - UL/cUL or ATEX/IECEX certified

These core components, along with an installation kit and a series of optional accessories, allow the user to configure a system that meets their specific needs on the delivery vehicle, loading rack, or other liquid dispensing application.

EMR4 APPLICATIONS

AVIATION



REFINED FUELS

RAIL



DEPOT



DEF



LOADING



LPG



WIRELESS TRANSACTION AUTOMATION

The easy to use Veeder-Root **DataLink PC-based software** provides a **data management system** that **communicates wirelessly** to the **EMR4** and generates **automatic reports** that can be viewed anywhere in the world from any device.

The **EMR DataLink wireless data capture solution** is the most efficient way to **wirelessly manage custody transfers and inventory reconciliation, perfect for aviation, mobile fueling, and terminal applications**, among others. It allows users to avoid the human error involved in manual ticketing processes where tickets can be easy lost or miswritten. The EMR DataLink Software works by **pulling encrypted transaction data in real time**, straight from the meter register and into your back office, where it can be viewed securely within a locally hosted database. DataLink sends transaction data from the meter register to the server automatically, giving you better data going into the back office more frequently.

This customizable solution can create reports by date, time, customer, or even driver and vehicle, among dozens of other options. EMR DataLink customization options extend beyond automated reports. Developed from the direct input of major oil companies, it can be customized to fit your business needs. With no recurring fees for use, DataLink is an investment in technology that can modernize your business's reconciliation processes and increase manpower efficiencies.

1

*Transactions captured
by EMR4*



2

*Automatic, wireless data
transmission via DataLink to
your back office*



3

*Advanced reporting.
Data analytics.
Transaction reconciliation*



4

*Auto-export to your
accounting or other business
management software for
invoicing and reconciliation*



TECHNICAL FEATURES

CERTIFICATIONS

- Global Weights & Measures approval for installation anywhere in the world
- UL/cUL, ATEX/IECEX, and PESO certified
- Class 1 Division 1 certification for approved installation in all mobile and stationary applications
- NMO, NMI, Welmec 7.2 certification

DISPLAY

- Dual Register Head System – Simultaneous operation with one IB Box
- Remote style display head option available for easy integration into custom installation
- Built-in support for multiple languages (ENG, FRA, SPA)
- Anti-fog, nitrogen-purged, ultra-bright LED white backlit display
- Display head rated for -40° to 60° C

FUNCTIONALITY

- Enhanced memory and processing power for fast robust operation
- Two RS-232/485 communication ports for easy access to data and remote control
- Multi-tier price/tax discount (percentage, flat rate, and surcharge)
- Wi-Fi support for setup, control, wireless data transmission
- System design is adaptable to all meters
- Easier programming and data entry with optional keypad
- Multiple product deliveries on a single delivery ticket
- System labels and delivery tickets are customizable and printable
- Free software upgrades available on veeder.com
- Removable connectors for easy field wiring

CONTROL

- Electronic temperature compensation
- Single or Multi-Point calibration
- Store hundreds of transactions in built-in nonvolatile memory
- Currency and volume preset deliveries
- Daisy chain up to 32 register heads in one network
- Built-in USB for software upgrades
- Remote emergency start-stop interface
- Remote start/stop interface
- Three Relay Configurations per Display Head for electronic valve control, pump control, and more
- Remote start/stop interface
- Three Pulse Outputs per Display Head each with selectable voltage for XL LED displays, additive injection systems, tank level systems and more

DATALINK

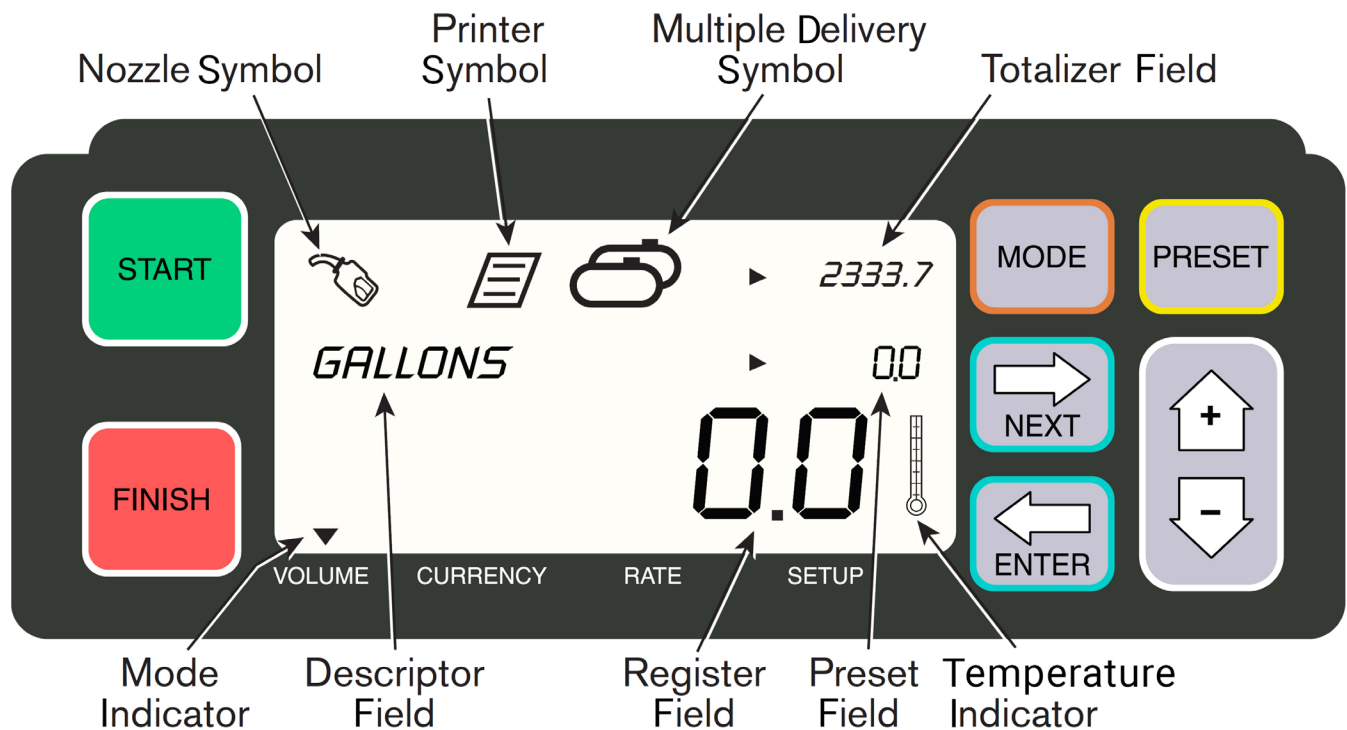
- Backwards compatible with EMR3 systems
- Automatically capture, record and transmit all meter activity to your back office
- Encrypted wireless signal for maximum security
- If truck is out of range, transmission automatically resumes once in range
- Indoor/Urban range up to 1000 feet
- Outdoor line of site range up to 9 miles
- 900MHZ modem
- Direct connect using RS-232
- Supply voltage 7 - 28VDC
- Generate custom reports and printouts

DISPLAY HEAD FUNCTIONS






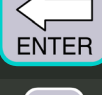






METER-MOUNTED DISPLAY HEAD



REMOTE DISPLAY HEAD



NOTE: Meter-Mounted Display Head and the Remote Display Head have the same screen features.

FEATURE	PICTURE	DESCRIPTION
START		Push button to begin the delivery. The Nozzle Symbol appears in the upper left of the display indicating you are ready to dispense fuel. If multiple products are available for dispensing, select Product by using the arrow keys and press ENTER.
FINISH		Press button to end fuel dispense transaction. After transaction is complete, pressing FINISH will clear the display (0.0 in the Register Field).
MODE		Push to cycle between VOLUME, CURRENCY, RATE, and SETUP mode. Mode Indicator will move in relationship to the MODE button being pressed.
PRESET		Push button to make a preset delivery and PRESET GALLONS displays in place of GALLONS in the Descriptor Field.
NEXT		Press to enter the value fields in SETUP, Product selection or Preset selection.
ENTER		Press to accept selection of parameter or alphanumeric values, or to return to prior menu selection.
Up (+) and Down (-)		Press buttons to display a preprogrammed preset, or to select another number. Press ENTER to accept the next preset amount.
Nozzle Symbol		Fuel nozzle icon displayed constantly when system is ready to dispense. The icon will flash when approaching the time-out in delivery mode (30 seconds).
Printer Symbol		A page icon will display when a printer is configured for the system.
Multiple Delivery Symbol		This icon will display when the multiple delivery state is initiated.
Totalizer Field	<i>2333.7</i>	Displays the total amount dispensed through the display head.
Temperature Indicator		This icon will display only when a temperature compensated product is selected.
Preset Field	<i>0.0</i>	Indicates a predetermined amount of fuel or currency to dispense. This value will count down to zero.
Register Field	<i>0.0</i>	Displays the current volume, currency value, final price, or rate of fuel dispensed.
Descriptor Field	<i>GALLONS</i>	Rolling text capable of showing extended messages: labels, descriptions, and error codes.
Mode Indicator		Indicates which mode the display head is currently in: Volume, Currency, Rate, Setup

EMR4



- For more information on EMR4, visit www.gilbarco.com/mea