EMR³ Electronic Meter Register

Next generation
electronic meter register systems.

VEEDER-ROOT

The Next Standard in Electronic Register Systems

The new generation of electronic meter-register, exemplified by Veeder-Root's EMR³, wraps the latest technology within a robust/user-friendly system, providing unprecedented value for customers worldwide. Fully capable of meeting the most demanding customer requirements, it can be affordably configured to fit a wide variety of industry applications. For over four decades, Veeder-Root's Mechanical Register has set the global standard in quality, performance and value. We carry on that tradition with the EMR³.

Customer-Aided Design

Veeder-Root's product team used feedback from meter-register customers world-wide to design the electronic register system that users wanted. The result is a truly unique system architecture. The EMR³ system is comprised of two separate building blocks; the Register Head (display), and the Interconnect Box (I.B.). These core components, along with a series of accessories allow the user to configure a system that meets their specific needs on the delivery vehicle or loading rack. A benefit of this unique system design is that two Register Heads can connect to a single I.B., and up to 16 I.B. units (connecting up to 32 Register Heads!) can network together for very large customer applications through Veeder-Root's I.B.net software solution. Maintaining a watchful eye on your fuel dispensing operations has never been so easy!

The Register Display Head

Customers have consistently rated the EMR³ display as the best in the industry. The nitrogen filled, anti-fog backlit display shows four individual data fields simultaneously; totalizer, preset/price, register, and activity descriptions provide essential information for fuel deliveries. Additional display icons give the EMR³ the ability to communicate a host of other fueling conditions and modes of operation. Current users have found the rugged programming keys on the display face to be one of the most desirable features, as they can quickly enter data and configure the unit. Optional features include a high quality digital keypad, which mounts directly to the register housing. The EMR³ Register Display can mount directly to the most common PD meters in use today. An additional connection will even provide for an Emergency Stop feature, adding another layer of safety to your fueling operations. For aircraft refueler lift or similar applications, a fully functional remote register display is available that permits complete operational control over the primary register head.

Configured to fit a wide variety of industrial applications.

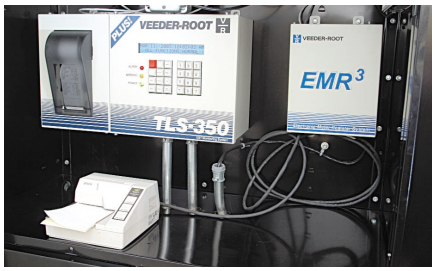
The EMR³ is a perfect metering tool for aircraft refueling platforms. Its advanced features make it a vital tool for above ground storage tank and dispensing terminals.

The Interconnect Box (I.B.)

The I.B. controller unit mounts directly in the vehicle cab or building and provides intrinsically safe power to the EMR³ Register Head(s), located directly at the meter. The I.B. is the networking hub of the EMR³ system, allowing it to communicate with a wide variety of data-capture devices. Providing customers with a selection of 4 standard models to meet specific application requirements, each I.B. unit can run a single or dual register head (simultaneous operation) configuration. For further customization, the I.B. can program individual remote start-stop inputs for each of its register heads. Designed for worldwide use, the I.B. unit is available in 12vdc or 24vdc and can come with up to four relays for valve switching.

Transaction Data Storage

The ability of any electronic meter register system to store fuel-dispensing transaction data is critical in today's total-solution business environment. That's why Veeder-Root designed a non-volatile memory capability in the EMR³. The I.B. unit continuously stores data for the last 200 transactions. All EMR³ systems include three communication ports, intended for connection with vehicle On-board computers, Delivery Ticket Printers, I.B.Net, or other auxiliary devices. Many leading back-office software providers rely on the EMR³ as a key component in their fuel-solution offerings, using hand-held devices to transfer data from the I.B. unit to the customer's Back-office PC.



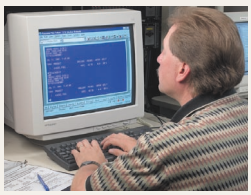
The EMR³ can be connected to any Veeder-Root TLS series automatic tank gauge for enhanced fuel monitoring capabilities

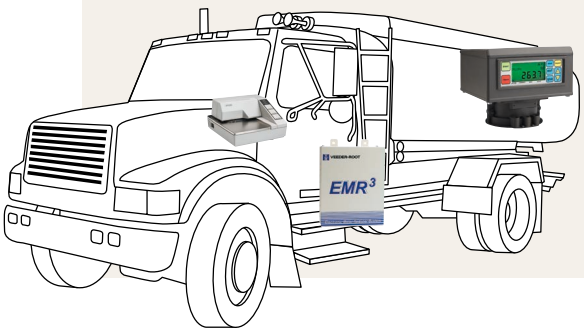
Features

- All Weather-Backlit Display
- Delivery, Totalizer, and Preset all in one Display
- Fully Customizable Delivery Tickets
- Adapts to all Meters
- Rugged Programming Keys
- Temperature Compensated Delivery (each with different product calibrations)
- Currency & Volume Delivery Modes
- Currency & Volume Preset Deliveries
- Multiple Product Deliveries (each with different product calibrations)
- Multiple Language Capability
- Customizable Text Labels (use your own product codes or names)
- Dual Register Head - Simultaneous Operation
- Non-Volatile Memory continuously stores the last 200 transactions made
- Shift Report Printing
- 0 and 4 I.B. Relay Configurations
- Multi-Point Calibration for exceptional accuracy
- Fully Functional Remote Register Display (permits remote operation)
- Defuel and Defueling Presets
- 15 Tier Price/Tax/Discount (Percentage, Flat Rate, and Surcharge)
- Itemized Multiple Delivery Transactions (show per tank data)
- Personalized Startup Screen Text
- Remote Emergency Start-Stop interface for each Head
- I.B.Net – Interface up to 32 Register Heads in one network!
- 3 I/O Com Ports (RS 232/485)
- User Defined Pulse Output (connect with other inventory systems)
- ATEX and UL Approved
- Weights and Measures World-Wide Approval: OIML, CW&M, French, NCWM (NIST Standards)

Enhance Your Back Office Communications

The EMR³ can transmit vital inventory data via the I.B. box to an in cab printer or using hand-held devices to transfer data from the I.B. unit to the customer's Back-office PC.

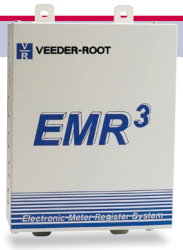




Customers consistently rate the EMR³ display as the best in the industry.

EMR³ with optional key pad

Fully functional remote register unit



EMR³ Interconnect box (I.B.)

EPSON slip printer

EMR³ Register Head Models*

Form Number	Description
0845693-210	Register Head – Volume Only
0845693-211	Register Head – Volume with Temperature Compensation
0845693-310	Register Head – Volume and Currency
0845693-311	Register Head – Volume, Currency, and Temperature Compensation

*Our Non-US Register Heads are not listed above, so please inform your customer service rep where your EMR³ will be used to ensure the correct model is ordered.

EMR³ Interconnect Box (I.B.)

Form Number	Description
0845893-001	I.B. – 12 Volt, without Time & Date, No Relays (Base System)
0845893-002	I.B. – 24 Volt, without Time & Date, No Relays (Base System)
0845893-211	I.B. – 12 Volt, with Time & Date, 4 Relays (Full Feature System)
0845893-212	I.B. – 24 Volt, with Time & Date, 4 Relays (Full Feature System)

EMR³ Accessories and Printer

Form Number	Description
0846000-015	Pulse Generator Kit
0846000-014	Keypad Kit
0846000-002	Temperature Probe Kit
0846000-017	C&C (Calibration and Configuration) Internal Switch Kit
0846000-018	C&C (Calibration and Configuration) Corner Switch Kit
0846000-020	Epson Printer Kit* with Cable Harness
0846000-021	Emergency Stop Switch
0846000-003	3-way Solenoid Valve Kit for Propane Applications (includes cable)
0846000-016	Printer Tray Stop Switch Kit (For Mechanical Printers)

*The Printer Kit includes the Epson Slip Printer and printer cable. This cable can be ordered separately.

EMR³ System Ordering Information

General Information

- A system normally consists of a Register Head, I.B. Unit, Printer Kit, and Installation Kit.
- All systems have preset, printer, and 200-transaction data storage capability.

EMR³ Register Head

- Select the Form Number for the register head with your desired feature combination.
- If Temperature Compensation (TC) is required, order a Temperature Probe Kit and a TC Capable Register Head.
- Typically each register head requires an EMR³ pulse generator kit to interface with the rotating shaft located at the top of the meter.

EMR³ I.B.

- Select the Form Number for the I.B. unit with your desired feature combination.
- Two models of I.B. are available; one with relays, time & date stamping (Full Feature System), and one without relays, time & date stamping (Base System).
- One I.B. is capable of running two Register Display Heads.
- An installation kit for the I.B. includes forty feet of cable and fire cord grips. Order Form Number 846000-012.

Register Display Head Installation Kits

To streamline the ordering process, EMR³ installation kits are setup according to meter manufacturer and with or without temperature compensation, for typical delivery truck installations. Each kit contains the necessary hardware required to install the Register Display Head and meter manufacturer-specific hardware. For non-truck or atypical EMR³ applications, individual installation kits are readily available. Your Veeder-Root Customer Service Representative will help you choose the correct installation kit when you place your order.

For further information, contact Veeder-Root Customer Service in Altoona, PA:

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