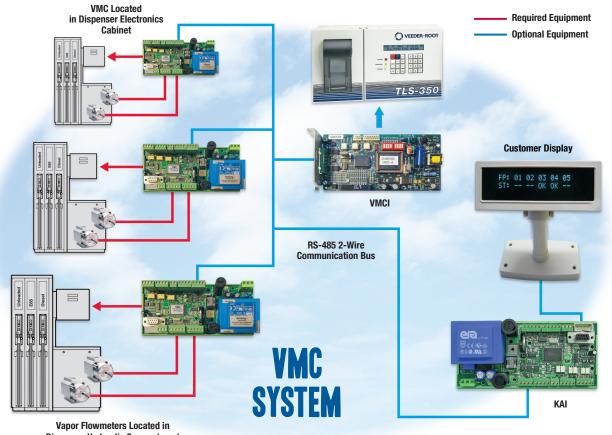
# **VEEDER-ROOT VAPOR MONITORING CONTROLLER (VMC) SYSTEM**



**Dispenser Hydraulic Compartment** 

# THE A/L MONITORING SYSTEM WITH A PROVEN TRACK RECORD!

Veeder-Root's VMC system has been installed throughout Europe, and is well-known for its reliability and accuracy. The VMC system algorithms conform to VDI 4205 and meet the requirements of 21st BImSchV in Germany and 2009 No 533 in New South Wales Australia.

The VMC vapor flowmeter uses identical Veeder-Root mechanical technology deployed for the California EVR In-Station Diagnostics (ISD) system. Rest easy knowing Veeder-Root's vapor flowmeter has a proven track record with over 50,000 units installed globally.

Whether through the TLS-350, the Kiosk Alarm Indicator (KAI) or each VMC in the dispenser, multiple reporting options provide maximum flexibility to the customer for regulatory compliance.



# **Benefits**

- Reduces contractor visits by using Re-Regulation equipment to keep A/L results in compliance
- Exceptional collection performance reduces Volatile Organic Compounds (VOCs)
- Veeder-Root's Inform or Fuel Management Services provides immediate alarm notification and results are easily transferred to customer's central office for data management
- Expanded reports for improved diagnostics and regulatory compliance

# **Features**

- ATEX and IECEx certified
- TUV approved
- Reports available via TLS-350, KAI, or VMC
  - Fueling position status
  - Time remaining until fueling position shut-down
  - Serial reports available for TLS-350 and VMC
- Remote services available via Veeder-Root's Inform or Fuel Management Services (TLS-350 required for remote access)
- TLS-350 and/or KAI audible alarm recognition/monitoring

### Vapor Monitoring Component List

Required Equipment	Part Number
VMC	900381-001
Vapor Flowmeter (IECEx & ATEX approved)	330020-545

Optional TLS Equipment		
You Currently Have	You Will Need	Part Number
TLS-350, TLS-350 Plus TLS-350R w/ECPU	ECPU2, Latest V.1XX	331500-308
	VMCI	847490-473
TLS-350, TLS-350 Plus TLS-350R w/ECPU2	Latest V.1XX Software	331500-303
	VMCI	847490-473
TLS-350, TLS-350 Plus TLS-350R w/ECPU2 & NVMEM 201 or 203	Latest V.3XX Software <sup>4</sup>	331500-353
	VMCI	847490-473

Optional KAI Equipment	Part Number
Kiosk Alarm Indicator (KAI) Kit (Kit includes KAI, Customer Display, Housing, and Cable between KAI & Customer Display)	900641-001

Optional Re-Regulation Equipment <sup>5</sup>	Part Number
<b>Re-Regulation Kit</b> (Kit includes Cable, Dongle, and Adapter)	900382-001

# VMC Report Summary

Reports <sup>1,2</sup>	Description
<b>A/L Daily Records Report</b> (Serial command VA1XX)	Average daily A/L ratio per fueling position per day. The last 365 days are available on this report.
<b>A/L Exception Report</b> (Serial command VA2XX)	Report by fueling position indicating any transaction (up to the last 100 transactions) which were outside the regulated A/L limits.
<b>A/L Transaction Report</b> (Serial command VA3XX)	Report by fueling position indicating all transactions (up to the last 1000 transactions).
Status Report <sup>3</sup> (Serial command BB1XX)	Report by fueling position indicating the current status at the time of polling.

### **Monitoring System Requirements**

#### VMC (1 per dispenser)

- Software 2.05 or greater (specify 3 or 7 day warning period at time of order)
- Output available for dispenser shutdown
- Access to dispenser pulse data required
- Veeder-Root Vapor flowmeter (1 per active fueling position)

#### TLS-350 Upgrade Equipment (Optional)

- VMCI (VMC Interface for TLS-350)
- One interface module per network
- Maximum of 18 VMC's connected to one VMCI
- VMCI software 2A or greater
- TLS software 31 or greater 4
- ECPU2

#### KAI (Optional)

- KAI software 1.08 or greater
  - One KAI per network

#### Re-Regulation (Optional)

- Uses VMC A/L results to adjust vapor collection rate
- Seeks to maintain A/L close to 1.0
- Applicable for systems equipped with the VRC 390
- 1. Refer to the Veeder-Root Serial Interface Manual (manual number: 577013-635) for further details.
- TLS-350, VMCI, and VMC software versions must all be as indicated in "Monitoring System Requirements" above or the only report available is the Status Report.
- 3. Status Report is available on TLS software version 28 or greater.
- 4. All 3XX software requires NVMEM 201 or 203 to operate.
- 5. Kit is not pictured. Contact Veeder-Root representative for details.

To learn more, visit www.veeder.com.



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