# LCR.iQ™

## METER REGISTER AND DATA CONTROLLER



STATUS: ACTIVE
Propane

# 323.9

Gallons
Volume Corrected to 60 °F

Show Details | Preset Volume | Stop | Resume | End & Print

# CENTRILOGiQ®

The center of fueling logic

by **LIQUID CONTROLS®**

# CENTRILOGiQ®

## The Center of Fueling Logic

Inspired through LC's PartnerConnect initiative, the new Liquid Controls **CENTRILOGiQ** platform is the product of years of direct design collaboration with LC customers and partners to address the industry's future needs.

**Q: What is the CENTRILOGiQ platform?**
**A:** CENTRILOGiQ is a fueling data and controls platform designed to connect critical sensing, control, and data management technologies to fueling operations and the outside world.

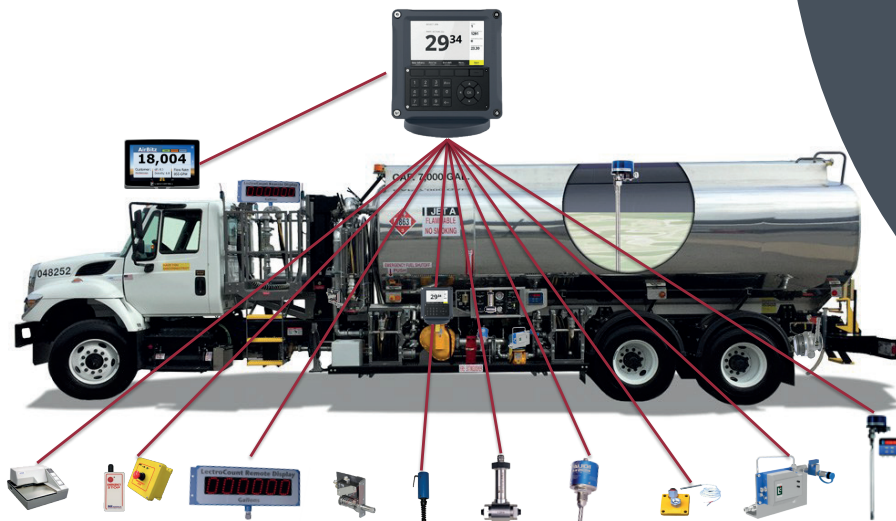**Q: What makes up the CENTRILOGiQ platform?**
**A:** The platform consists of the LCR.iQ electronic register and they system of various sensing and control devices that connect through it.

**Q: What devices are compatible with it?**
**A:** CENTRILOGiQ is manufacturer agnostic. It is intentionally designed for compatibility with all major OEMs, sensing devices, and 3rd party data providers.

**Q: Can I customize it for my operations?**
**A:** Yes! It provides users the luxury of configuring the fueling process, screen layout, and data outputs to allow end users to standardize fueling procedures across their fleet.

# Primary Markets

While the **CENTRILOGiQ** platform was intentionally designed for demanding truck based fueling markets, it also easily supports the variety of skid based and fixed fueling applications and markets.



## Refined fuels and LPG Fueling

Extreme reliability and game-changing simplicity of use for the full range of truck based fuel delivery applications.



## Aviation Fueling

The aviation fueling profile provides both configurability and scalability for the ever-changing regulatory and safety requirements.

# Designed by those who use it.

The LCR.iQ was built from the ground up from over 2 years of customer collaboration.  Easy to operate, easy to see, and easy to navigate were the primary ground rules of the design.   Functionality and connectivity that is scalable to adapt to future technology is the core foundation of the LCR.iQ.

# LCR.iQ Features

**HIGH-RESOLUTION HD DISPLAY**
7" ultrabright video display designed for extreme climates and rigorous fueling environments.

**LARGE DIGITS FOR EASY VIEWING**
Large digit display provides easy viewing in two viewing modes selectable by the operator.  Detailed delivery mode with all critical fueling data displayed or full screen mode for maximum digit size.

**CONFIGURABLE FUELING DATA**
The LCR.iQ allows configurable fueling profiles so customers can choose which data is shown on the detailed delivery screen.

**SMART KEYS FOR GUIDED OPERATION**
Smart keys help to guide the operator through the most commonly used functions without intricate training required.

**LARGE KEYS FOR EASY OPERATION**
All weather elastomeric keypads provide robust environmental resistance and easy navigation where data entry is required.

**METER MOUNT BASE**
Industry standard meter-mount base with integrated pulser.

**PANEL MOUNT ENCLOSURE OPTION**
Panel mount version without meter mount base for convenient remote mounting.

# LCR.iQ Technical Details

The LCR.iQ was built on a foundation of hardware and software designed to support decades of future innovation, regulatory requirements, and wireless connected technologies. The below list of features is the just the starting point for LCR.iQ. Significant additional capabilities currently in development are to be released ongoing in 2018.

| Features / Benefits | LCR.iQ™ |
|---|---|
| **General** | |
| Near instant startup, Boot time: | 5 seconds |
| No "Power on Timing Relay", Boot time: | 5 seconds |
| Temperature compensation | Yes |
| Multi-point calibration (up to 16 points) | Yes |
| Direct meter mount configuration | Yes |
| Remote panel mount configuration | Yes |
| Removable USB and SD data storage | Yes |
| 3rd party data providers open source access | Yes |
| Easy upgrade from LCR-II, LCR 600, and conventional registers | Yes |
| Internal telescoping Hinges (eliminates seizing external door Hinges) | Yes |
| **User Input and Display Features** | |
| Large 7", 810 x 480 high resolution, full color video quality display | Yes |
| Customizable SMART keys for simplified operator controls | Yes |
| Full alpha numeric keypad with easy arrow selection keys | Yes |
| Large Marine Grade, Petroleum Resisitent LED backlit buttons | Yes |
| Full screen mode for largest readable digits in the industry (viewable from greater than 100') | Yes |
| Day / Night mode for ease of operator viewing | Yes |
| Screen brightness adjustment | Yes |
| One-touch, instant onboard diagnostics and help screens | Yes |
| Customizable printed tickets | Yes |
| User configurable on-screen display data | Yes |
| Configurable delivery setup screen | Yes |
| Print historical tickets, 10,000+ transaction history logs | Yes |
| Unlimited Weights & Measures historical audit log. | Yes |
| Large memory storage for future video and document storage and viewing (manuals, videos, etc.) | Yes |
| On-screen virtual keyboard for ease of data entry | Yes |
| Customizable fueling screen profile by market type | Yes |
| **Connectivity** | |
| RS-232 and RS-485 Communication ports | Yes |
| Integrated CAN BUS | Yes |
| 4-20 mA connections | Yes |
| Ethernet connectivity | Yes |
| Embedded Bluetooth and Wifi for multiple wireless device connectivity. | Yes |
| 11 Conduit ports (1/2" NPT) | Yes |
| **Refined Fuels / LPG Specific Capabilities** | |
| Remote control (e-stop) compatible to Base Systems | Yes |
| 3rd party fleet automation connectivity and data management | Yes |
| Toggle Flow | Yes |
| Smart Pump compatibility (run-dry prevention) coming 2018 | Yes |
| **Aviation Fueling Specific Capabilities** | |
| Differential pressure monitoring / shutdown / reporting per JIG 58 | Yes |
| Manual or Automatic Fuel Density data | Yes |
| Water in Fuel monitoring / shutdown / reporting | Yes |
| Tank level monitoring / reporting | Yes |
| 3rd party fleet automation connectivity and controls | Yes |
| Additive injection contols and reporting | Yes |

# CENTRILOG**iQ**®

## Refined fuels and LPG

The LCR.iQ is designed to simplify all fueling operations through system customization and configurability, intuitive operation, and real-time fueling diagnostics to maximize up-time and daily throughput.



*LCR.iQ with LC M7 Meter with strainer and air eliminator*


Pulse Output Devices


Printers


Security/Preset Valves


Optical Air Eliminator


Temperature Volume Compensation


External WiFi Adapter–LC On The Go


E-Stops and Remote Controls


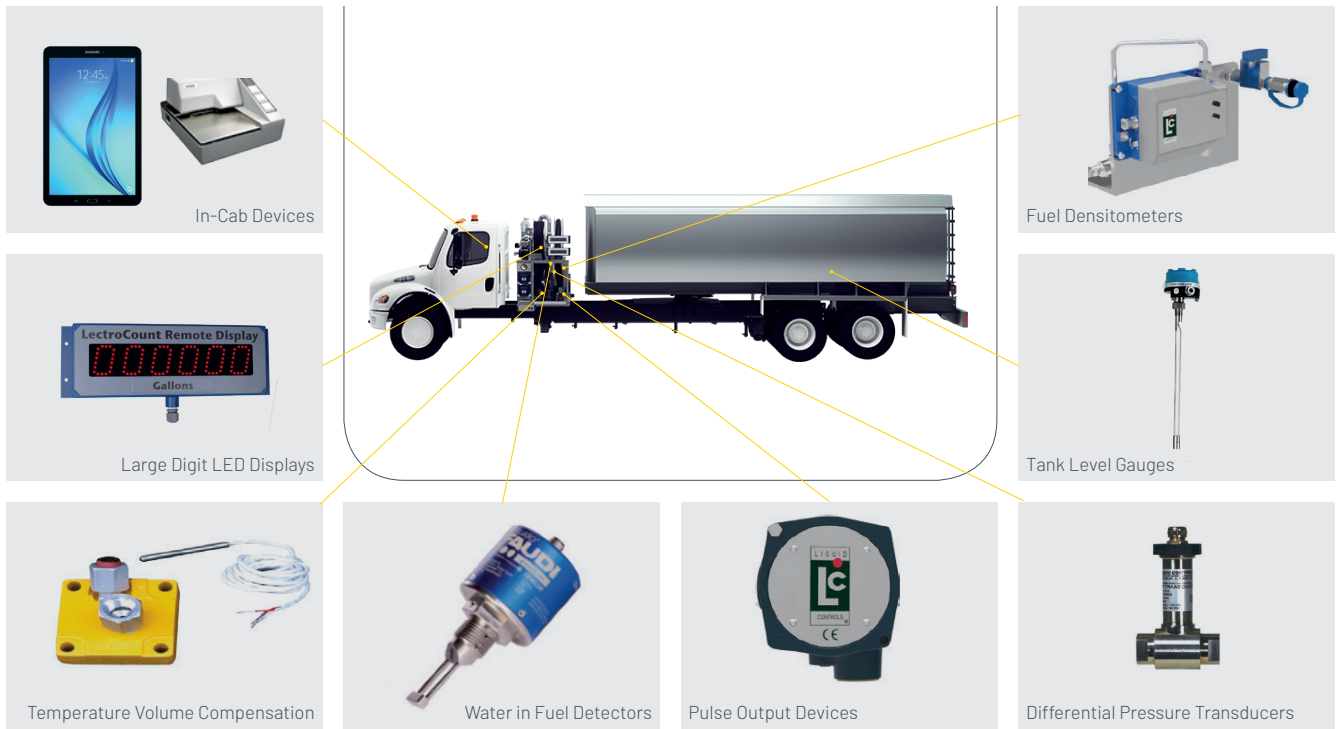In-Cab Devices

# CENTRILOG**iQ**®

## Aviation

The LCR.iQ is designed to connect all critical measurement and sensing devices in aviation fueling systems and is capable to deliver all measured and reported fueling data to back office systems.



*LCR.iQ with LC M80 Meter*



*LCR.iQ with Avery-Hardoll BM950 Meter*


In-Cab Devices


Large Digit LED Displays


Temperature Volume Compensation


Water in Fuel Detectors


Pulse Output Devices


Fuel Densitometers


Tank Level Gauges


Differential Pressure Transducers

# CENTRILOGiQ®

## The center of fueling logic

by **LiQUID CONTROLS®**

STATUS: ACTIVE
Diesel

# 125.1

Gallons
Volume Corrected to 60° F

| Setup Delivery | | Main Menu | Print Last Ticket | Stop & Print |

ABOVE: LCR.iQ shown in night-mode.

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