

Optima™ CNG Fueling Dispenser

THE **NEXT GENERATION** OF FUELING DISPENSERS IS **NOW**.

Optima™ is the most advanced alternative fuel dispenser on the market today. Featuring a newly designed purpose built cabinet equipped with the powerful new **MICON NEXTGEN 1.0®** controller, **Optima™** enhances station control and performance via its unmatched data collection and communication capabilities.

Optima™ is the result of over three decades of CNG focused experience and feedback from the field. Recognizing a need for easily accessible detailed historical and real time data, **Optima™** offers greater functionality in extracting and synthesizing relevant data to identify trends, creating a smart station.

Optima™ offers a new level of fuel dispensing performance while maintaining the high standard Kraus Global has set for safety, reliability and accuracy.



Optima™ serves you better:

● Introducing the PULSE™ Display

- o Revolutionary new proprietary display to communicate real time status of each fill
- o Users can visually follow fill progression
- o Provides operators visual data to monitor and troubleshoot station performance

● Uptime and Reliability

- o Save time and money with remote software upgrades, advanced monitoring, and troubleshooting tools
- o Easier serviceability with purpose built CNG cabinet

● Fill Data and Reporting Capabilities for Each Hose

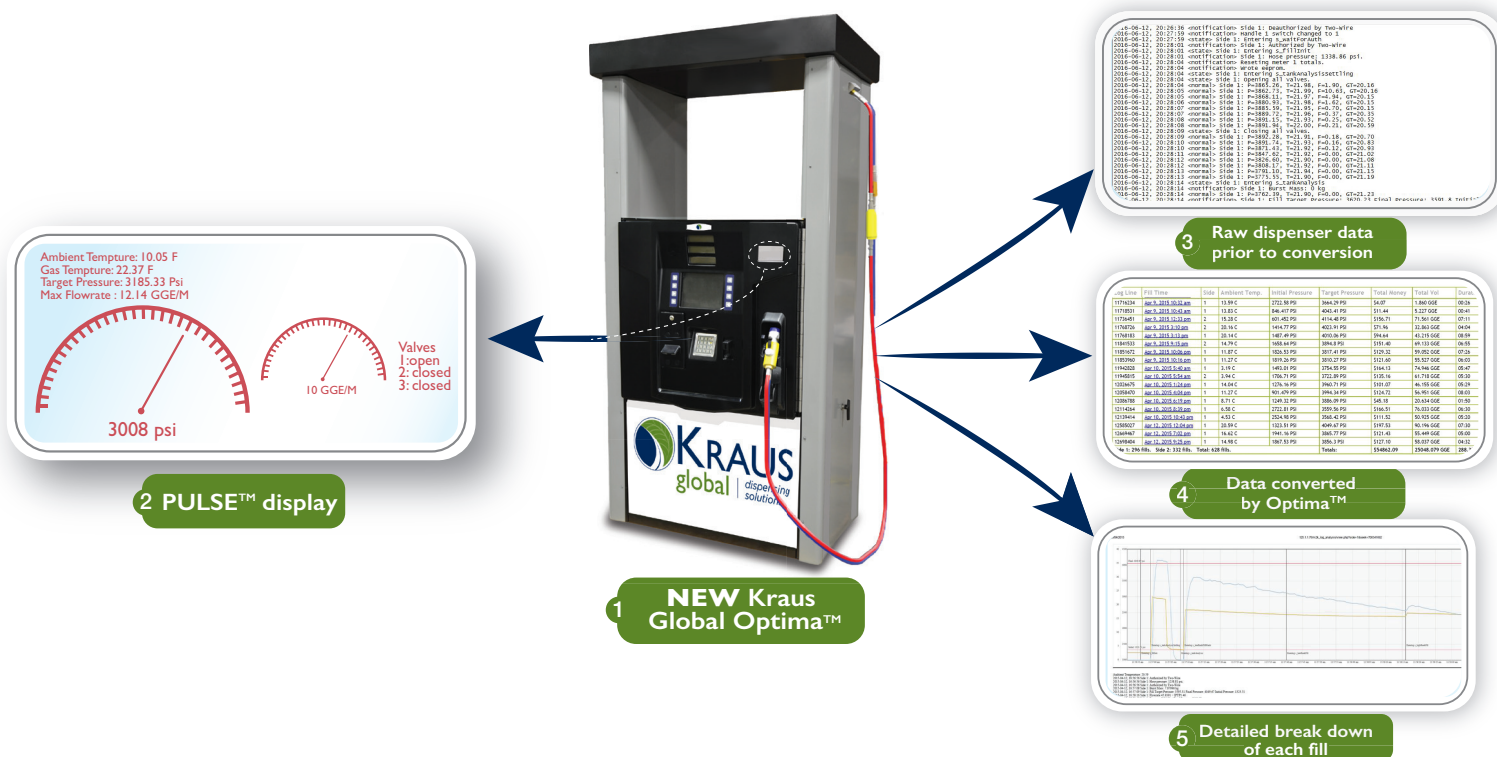
- o Real time data via **PULSE™** display provides dispenser and station data to the user.
- o Store data for larger analysis of overall station performance

● Accuracy and Completeness of Fill

Kraus Global has engineered a new, more powerful **MICON®** controller.

- o Faster data acquisition and sensing of key process variables
- o Direct connection between **MICON NEXTGEN 1.0®** and the mass flow meter
- o Enhanced filling algorithm leverages the computing power of the **MICON NEXTGEN 1.0®** to reduce lookbacks (filling pauses)
- o Expanded filling variables allow more control to dial-in the dispenser for site conditions and vehicle types
- o Superior data acquisition capabilities and analysis tools allow for more intelligent fact base filling variable adjustments in order to optimize fills

OPTIMA™ DIFFERENCE



- 1 Giving you greater control, **Optima's™** real time error reporting and remote set point configuration is used to aid station operators in automating and optimizing station performance for greatest profitability and uptime.
- 2 Introducing the **Kraus Global PULSE™** display. This proprietary display communicates real time status of each fill. Information displayed allows the vehicle operator to be in tune with starting and ending parameters of their filling process, reassuring that a target was established and met. Service technicians can utilize the display to monitor the valve state, flow rate, and filling conditions to efficiently diagnose potential issues.

The display is designed for customization allowing the master station PLC to drive the information on the screen. The **MICON NEXTGEN 1.0®** provides open **MODBUS** registers that can be easily set up to take raw station data and display useful information (i.e., compressor run states, priority panel valve states, storage pressure on all banks, etc.) in real time.

- 3 **Kraus Global** understands the value of data and how it can be used to increase efficiency and profitability of a station. Recognizing a gap in the ability to obtain detailed data from the dispenser, **Kraus Global** engineered the new **MICON NEXTGEN 1.0®** controller to extract and communicate relevant data and provide it in a meaningful and easy to use way.
- 4 The **MICON NEXTGEN 1.0®** utilizes this data to compile informative reports which can be accessed from the dispenser remotely via the web in order to view real time and historical filling data in an easy to read manner. Data can be utilized to validate station uptime, complete fill accuracy, and fill times helping maximize station fueling contracts and customer satisfaction.
- 5 The **MICON NEXTGEN 1.0®** reporting tools further drill down into individual fills enabling station owners to adjust operating parameters thereby maximizing station performance. Fleet managers can further utilize this detail to evaluate the performance and fill conditions of each vehicle to ensure their fleet is fully optimized.

Optima™ is the most advanced **CNG** fueling dispenser on the market today giving you increased insight into the status of your dispensers and each fill at all times.

OPTIMA™ BENEFIT



Station Operators will appreciate more control over operating parameters through superior data acquisition capabilities, analysis tools, and the expanded set of configurable filling variables. In addition, enhanced diagnostics identify dispenser performance enabling faster trouble shooting and root cause analysis on site or remotely. Software upgrades can be installed remotely minimizing down time from having to send a qualified technician to the site.

Grow your fleet customer base by providing **Fleet Managers** historical and real time filling data. Maximum up time at the pump will increase your customer's reliance on your station to provide the best experience 24/7.



Enhanced diagnostics and the purpose built **Optima™** cabinet provide easier accessibility to internal components saving valuable **Technical Support and Maintenance** time and frustration while servicing the dispenser as required.

Kraus Global Promise

Kraus Global will continue to work with you, understand your business, and expertly guide you through the entire process of selecting the dispenser configurations which best suit your station design and meets your needs now and in the future. Our ability to customize solutions to suit your unique design criteria is a strength **Kraus Global** is recognized for in the alternative fuel industry.

Kraus Global is committed to the highest safety standards.



For specific engineering information about Optima™ and the MICON NEXTGEN 1.0®, or for a custom proposal to add Optima™ to your forecourt, please call 204-663-3601 or email us at inquiries@krausglobal.com.

OPTIMA™ CNG DISPENSER

Model: RETAIL

SPECIFICATIONS

| STANDARD FEATURES: | COMPUTING AND CONTROLS: | AVAILABLE OPTIONS: |
|--|---|--|
| Single and Dual Sided Units | MICON NEXTGEN 1.0® Controller and Register | Full color 10.4" TFT high-resolution display. |
| Service Pressure: 3,600 psi (250 BAR) Working Pressure: up to 5,000 psi (345 BAR) | 100 MB Fiber Optic Isolated Ethernet connection allows for safe high-speed connection to the dispenser. | Encrypted PIN Pad for retail debit and EMV credit card application (pending completion). |
| Temperature Compensated to 70°F | Communication Interfaces: Standard 2-wire POS/Credit Card Protocols. | Secure Card reader. |
| Flow rates: Up to 5,000 SCFM with high-flow configuration. Actuals vary based on site conditions, gas density, atmospheric pressure, temperature, and type of vehicle. | Remote configuration of dispenser(s) from a computer, tablet, or phone. | High Speed USB Printer for retail application. |
| Up to eight inlets per dispenser depending on tubing size and valve configuration. | Direct connection to mass flow meter. Error codes, gas temperature, and other meter data can be accessed via MODBUS. | Customized, Brand-centric graphic panels. |
| Internal Piping Stainless Steel, available in sizes from 3/8" up to 1" depending on flow characteristics desired and to best match station configuration. | Multiple POS/FMS/PLC communications interfaces. | Multimedia capable - video and audio with customer interaction capability via display softkeys. |
| Meter technology: Coriolis Mass Flow, 1 per hose, up to two per dispenser. | MicroSD card data logging 24/7 of every transaction. | Large over-canopy for customer branding purposes is available. |
| Primary Displays: Large backlit LCD Main display for Total Sale, GGE Volume and Price per Unit. | MECHANICAL CONTROLS AND VALVES: | Type 1 and Type 2 hanging hardware components. |
| Panels and doors painted black (standard) | Manual external shut-off valves, 1 per side. | REGULATORY: (Compliant. Pending Completion.) |
| In-Cabinet or Remote Coalescing Filters | Internal solenoid valves or high-flow actuated ball valves. | NCWM Certificate of Conformance. |
| | One Internal Liquid filled pressure gauge per hose. | MC (Measurement Canada). |
| | Check valve between sequencing valves. | PCI and EMV Credit/Debit Card Compliant. |
| PURGE SYSTEM: | Internal Piping Connections, available in sizes from 1/4" up to 1" depending on flow characteristics desired and to best match station configuration. | ETL Intertek Certification. |
| NFPA 496 Compliant Type X purge system designed to fully declassify the upper cabinet enclosure. | Pressure relief valve, opens at 4,500 psi (310 BAR). | NFPA 52 Compressed NGV Fuel Systems. |
| See Controls and Register section | 1" Vent line. | NFPA 70, ASME B31.3. |
| Handle lever to start/stop fill located on holster. | | ETL Certified Intrinsically Safe Inputs and Outputs for Class I, Division I environments (pending completion). |
| | | NTEP and Measurement Canada certified register (pending completion). |
| OPERATING ENVIRONMENT: | DIMENSIONS: | VOLTAGE: |
| -40°C to +50°C | Height: 93". | +/- 10% 120 VAC standard. |
| Humidity = 10-95% Rh | Width: 46" at base, 47.5" at canopy. | |
| 120 VAC heater available for temps <-20°C. | Depth: 23.75" at base, 29" at canopy. | 240 VAC available, 60 Hz. |

