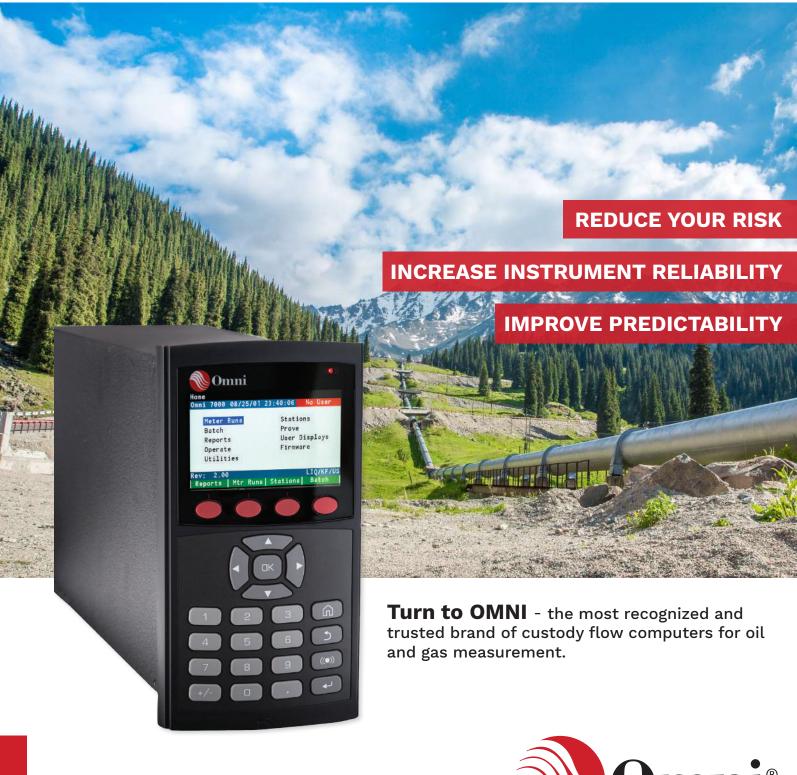
# 4000/7000 SERIES

# **OMNI Flow Computer**







# **Reducing Uncertainty and Increasing Reliability for Fiscal and Custody Transfer Flow Metering**

When transferring high value oil and gas, you want the lowest levels of uncertainty and increased reliability to ensure revenue streams for all involved parties are not impaired. Even minuscule errors can translate into a huge financial impact over time.

You need a flow computer that can capture large amounts of data from gas chromatographs, meters, prover, density measurement instruments, sampler systems, flow, temperature and pressure measurement systems, and other third-party equipment in real-time, using the latest security protocols, and operating in compliance to all global compliance and standards organizations, to calculate the precise flow rate.

With the Series 4000/7000 flow computer, OMNI delivers a highly secure, powerful, and flexible solution for flow measurement.



# **The OMNI Series 4000/7000** is everything you need in a flow computer





#### RELIABLE

Because small mismeasurements can have a tremendous impact on profitability, installing the most reliable flow computer for determination of volume, mass, density, and API-approved conversion calculations is necessary. The OMNI 4000/7000 uses proven mathematical formulas combined with the latest technologies to deliver a flexible, robust, and highly accurate and reliable system.



#### **TRACEABLE**

The OMNI Series 4000/7000 is fully traceable and incorporates the ability to log every change performed in the flow computer. The 4000/7000 allows a discrepancy to be traced back to the exact moment of change. OMNI also extends 100% traceability into our manufacturing and assembly process. Every flow computer is assigned a serial number, which allows the factory to trace the origin of every component, every step of assembly, and every point of quality testing and assurance. This process is incorporated into our ISO9000-2008 certification.



## SECURE

The OMNI Series 4000/7000 is the most secure flow computer available today. It addresses security from two positions. First, it offers protection from internal vulnerabilities — both accidental and intentional — with the inclusion of individual user IDs and password protection, multiple levels of permissions, and the ability to configure the system but not edit the factory programming. Second, it protects the system from cyber-attacks and outside hackers by protecting access ports with customizable passwords or user-customizable Modbus maps, SSL encryption, and intruder detection in the SysLog. Plus, cyber-attacks cannot interrupt the flow of calculations in the 4000/7000.



## **EASY TO USE**

The OMNI Series 4000/7000 simplifies the user experience in several ways. First, the front panel includes a highly functional, full-color LCD screen for fast, on-site interaction with the flow computer, as well as fewer buttons for enhanced usability. The OMNICONNECT® software incorporates enhanced configuration capabilities with an easy-to-learn and easyto-use interface. Users can also access the flow computer remotely through OMNIPAN-EL®, a Windows-based software application that mimics the look and functionality of the 4000/7000 front panel.



## ABLE TO STORE LARGE AMOUNTS OF DATA

The OMNI 4000/7000 has 128MB of ample execution memory. Measurement data storage is performed utilizing an 8GB SD card for historical data archiving. This highly efficient data storage feature translates into the ability to store data for very long periods – even multiple years. This makes it easy to conduct annual reconciliation or review. Because data can be extracted from the flow computer and then possibly manipulated in other systems within the process, the 4000/7000 maintains the original unmodified data so it can be used as an original reference if necessary. The data storage capabilities can also be used to provide data to external software applications in support of critical business analysis, such as for producing trending reports.

# Verifiable factory programming and traceable field configurability

## **OMNI SERIES 4000/7000**

The OMNI Series 4000/7000 flow computer delivers reliable, and fully traceable measurement of gas and liquid applications. As the most secure flow computer available, the 4000/7000 is ideal for custody transfer and fiscal measurement applications.

The Series 4000/7000, just like every OMNI built in the last 25+ years, is factory-programmed and user-configurable. OMNI provides secure factory programming, testing, and verification, so only field configuration is required to install, operate, and maintain the OMNI 4000/7000.

With full traceability from factory to operation, the OMNI 4000/7000 is the only flow computer to have received WELMEC WG7.2, issue 6, extension D approval. This means that if a discrepancy occurs, it can be traced back to the exact moment a change was made. This, combined with the large storage capacity of the Series 4000/7000, makes reconciliation much easier.

The new OMNI Series 4000/7000 flow computer combines decades of metering experience, verifiable factory programming, and traceable field configurability to ensure that it is the only choice when a reliable, secure, and fully traceable flow computer is needed.

## **APPROVALS**

UL, CSA,
Available with European
CE Mark. MID, European
Directive 2004/22/EC,
OIML R117-1, OIML D031,
EN12405 Part 1; WELMEC
WG7.2, issue 6, extension
D approval

# BENEFITS

- Enhanced functionality with a simplified user interface and powerful software
- Powerful, robust, embedded, real-time operating system
- ▼ Fast access to critical data when you have remote connections like PLCs, DCSs, or SCADA systems
- 365+ days of batch storage
- ▼ Searchable database
- Enhanced security for protection against cyberintrusions
- ✓ Individual user IDs and passwords for enhanced security



# When you want to collect data on a device that is flexible and configurable, YOU NEED OMNICONNECT®.

OMNICONNECT® is the highly flexible, easy-to-use software that is licensed with the OMNI Series 4000/7000 flow computer. Designed for an effortless user experience, OMNICONNECT® incorporates an enhanced level of configurability into a robust, fast, and highly responsive system. OMNICONNECT® allows users to perform many tasks on the 4000/7000, including online and offline flow computer configuration. It is also possible to view some operations, such as quality monitoring in gas systems, batching, and proving in liquid systems.

## **OMNICONNECT® FEATURES**

- ✓ Access to multiple flow computer sites
- Intuitive navigation and an easy to use menu
- ☑ User-configurable custom data screens for real-time register content
- **▼** Extensive F1 Help
- Administration of up to 16 user IDs and passwords
- **▼** Validation checks to recognize errors immediately
- **Built-in Modbus database browser**
- Customizable reports



# **BUILT WITH THE USER IN MIND**



**OMNIPANEL®** is another feature that makes the OMNI 4000/7000 user friendly. OMNI-PANEL is a convenient, Windows-based software application that delivers the look and function of the OMNI 4000/7000 front panel via a software interface.

It allows operator and technician functions to be performed remotely on the flow computer without being physically present at the 4000/7000 flow computer.

# **Depend Upon OMNI's Customer Support and Service**

# For the Life of Your OMNI

## WE'RE COMMITTED TO KEEPING YOUR OMNI OPERATING

With a MTBF (mean time between failure) of more than 10 years, OMNI flow computers are established as the most rugged and reliable flow computers available. However, when you require support, OMNI's team of customer service and field service specialists are available.

We offer:



#### **PHONE SUPPORT**

- · Software Licensing
- · Spare Parts Ordering
- Troubleshooting
- Operating and Configuration Questions



#### **FIELD SUPPORT**

- Installation
- Configuration
- Troubleshooting
- · Onsite/On-The-Job Training



#### TRAINING PROGRAMS

OMNI Educational Services offers a variety of training programs for operators and technicians of all skill levels. Our programs include online, classroom, and onsite training. Our courses include:

- **BASIC OPERATOR CLASS**
- **OPERATOR/TECHNICIAN CLASS**
- **ADVANCED TECHNICIAN CLASS**

We can also create a customized curriculum to fit your specific firmware or hardware needs and industry requirements.



## **TRAINING**

## **Training**

momi-training@omniflow.com

**(2)** +1.281.240.6161

Field Service & Technical Support

helpdesk@omniflow.com

+1.281.240.6161



# Migrate to a secure, reliable future with the **OMNI 4000/7000**

For 25+ years, OMNI has been committed to developing fully backward-compatible flow computers, so the OMNI you have installed on site can be upgraded to current OMNI specification, with all the capabilities, enhancements, and support that you need, when you need it.

The OMNI 4000/7000 was developed using a powerful operating system that supports substantial memory and real-time data transfer capabilities. It also incorporates the latest security protocols, which make the Series 4000/7000 the most secure flow computer on the market.



Custom Modbus database mapping converts most 4000/7000 registers to 3000/6000 flow computer registers, to maintain communications with SCADA and PLC systems, reducing engineering requirements.



The OMNI 4000/7000 uses the same chassis as the OMNI 3000/6000, reducing rewiring requirements and implementation time.

Installation requires minimal rewiring, to simplify installation and commissioning



Because the 4000/7000 flow computer incorporates these new solutions, OMNI has developed a simple migration path to allow existing OMNI users to transition to the best available embedded technology. When you upgrade your metering and information systems, the OMNI is the only component that provides multi-generational guarantees



OMNI Flow Computers, Inc. 12320 Cardinal Meadow Drive, Suite 180 Sugar Land, Texas, 77478-6218, USA

## Sales and Service:

- +1 281-240-6161
- **+**1 281-240-6162
- sales@omniflow.com
  helpdesk@omniflow.com
  omni-training@omniflow.com
- www.omniflow.com