Optimum measurement and control of oil and gas flows

Optimize measurement and control of complex oil and gas applications by upgrading your legacy flow metering system. Emerson’s latest generation of DanPac Systems offer smart, integrated custody transfer solutions that are easy to implement and deliver exceptional accuracy and unsurpassed control of flow metering installations.

The DanPac Standard System is designed for more complex measurement sites yet is easy-to-implement, with completely preconfigured control hardware and standardized components as well as built-in communications and controller redundancy. Additional benefits include reduced cost of ownership and rapid support via Emerson’s Global Lifecycle Services network.

In cases where rapid deployment is critical, the new DanPac Express System fulfills the growing demand for a reliable, scalable metering control solution. A streamlined hardware configuration helps further reduce complexity and cost while the extensive plug-in architecture supports a variety of functions, including batching, proving, flow switching, sampling and more.

Whether upgrading to a DanPac Standard or Express System, you will benefit from the latest technologies for improved performance, scalability and sustainability. In addition, enhanced reporting capabilities improve data security and accessibility, and a single configuration utility for screens, reports and control logic simplifies future system changes and modifications.

Applications:
- Custody transfer
- Pipelines
- Refinery
- Wellhead measurement
- Off-shore production
- Loading / off-loading

Get started today

Daniel’s highly trained certified technicians are located worldwide, providing you with service and support in more than 80 countries.

For a quotation customized to meet your particular service needs, please contact your nearest Daniel Measurement and Control Sales and Service office as indicated below, or submit a service request online at daniel.com.

Keeping you at peak performance

Daniel is the world leader in custody transfer and fiscal flow measurement products, systems and services. We understand the importance of your flow metering measurement, and in an environment of volatile oil and gas prices, the financial risk due to measurement uncertainty is greater than ever before. That’s why Daniel is committed to helping reduce your metering equipment uncertainty anytime and anywhere.

Our global reach, broad range of services and certified service specialists supported by over 80 years of oil and gas industry experience enable Daniel to support you for the life of your metering installations – and that’s a certainty.

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**Improve performance**

Upgrade your custody transfer metering system with a DanPac control system to achieve unparalleled performance:

- **Faster Implementation and System Changes** Take advantage of a single software platform for data acquisition, control logic, reporting and Human Machine Interface (HMI) to speed implementation and turnaround time as well as simplify future configuration changes and upgrades.

- **Expert Lifecycle Support** Anywhere in the World DanPac upgrades are all-encompassing solutions that greatly enhance lifecycle support on existing legacy systems. While a basic HMI upgrade can perpetuate issues with a one-off, customized package, a DanPac configuration provides a standardized application, ensuring expert support anywhere in the world via Emerson’s global service network.

- **Simplified System Expansion** Hardware can be easily added in the future with the scalable DanPac system architecture.

- **Improved HMI Performance and Responsiveness** Powerful HMI capabilities within the DanPac System deliver graphical metering process displays that respond better to operator commands and improve overall system performance in comparison to HMI in legacy metering control systems.

- ** Expedited Detection of Operational Issues** The DanPac System provides improved data trending functionality to help operators quickly pinpoint operational anomalies.

- **Process Trending to Mitigate Downtime** The fully-integrated historical process trending capabilities of the DanPac System greatly improves an operator’s ability to effectively monitor the metering system and proactively identify potential problems.

- **Enhanced Data Integrity** The DanPac System generates and stores fiscal metering and proving reports in read-only, PDF format to enhance data security. Current and archived reports are also easy to locate and retrieve using the DanPac report browser.

**Increase reliability**

Three levels of DanPac upgrades are available to increase the reliability of any legacy metering system:

- **Level 1: The DanPac HMI Upgrade** allows customers to upgrade the HMI portion of their system only. The existing metering panel, programmable logic controller (PLC) and flow computers remain in place.

- **Level 2: The DanPac HMI and Controller Upgrade** is designed to completely replace the existing PLC and includes a controller with I/O modules mounted in a common rack. In most cases, the new controller and I/O modules will be mounted in place of the PLC. A serial or Ethernet interface to existing flow computers is also included. This upgrade solution is ideal for applications requiring replacement of an aging PLC.

- **Level 3: A complete DanPac System Upgrade** includes a full DanPac Standard or DanPac Express System along with a set of Daniel S600+ Flow Computers to replace existing flow computers, as required. Due to the number of new components associated with this upgrade, a new cabinet is provided to ensure all devices are properly mounted on the panel.

**Enrich your system with options**

Every DanPac System upgrade solution offers a set of standard reports and screens for typical fiscal metering and proving applications. The basic upgrade package provides a simplex DanPac System controller and simplex communications between system devices. A number of additional options are available to enhance any DanPac System upgrade, including:

- Fully-redundant DanPac System architecture for greater data and operational security

- Redundant DanPac System control network

- Redundant serial and/or Ethernet communications to PLC and flow computers

- Additional and/or custom reports

- Additional and/or custom HMI screens, including custom metering graphics

- DanPac System report browser.

Furthermore, the DanPac System technology and architecture allow access to a number of optional features and services that can greatly improve operational performance, maximize uptime and help minimize costs. These options include:

- **Operator Training Solution (OTS)** OTS provides simulation of the metering system functions for operator training purposes and for testing future system configuration changes by simulating the operation of the metering system.

- **Comprehensive Security** A comprehensive ‘Defense in Depth’ approach is used to ensure a series of hardened layers are put in place to secure the DanPac System against cyber attacks and more. All aspects of the system are taken into consideration, including software, hardware, network and physical security, to ensure a tailored security solution is provided.

- **Asset Management Tools** This option delivers fully-integrated asset management capabilities to minimize system downtime, improve performance and reduce operating costs.

- **Smart Meter Verification (SMV)** Service SMV provides remote monitoring of system performance and status by a factory trained, field experienced Emerson flow specialist via a simple dial-up or TCP/IP connection.