Honeywell Enraf



Fusion4 Loading Automation Solutions



Scalable and versatile, Fusion4 brings intelligent features and powerful functionality to loading, blending and additive injection operations. It allows terminal operators to continuously control and monitor system performance.



Honeywell Enraf's Fusion4 Microblender helps reduce bus emissions in London.

Fusion4: A New Concept in Control

Fusion4 brings you powerful functionality and a groundbreaking user experience for better loading, blending and additive injection. The industry's most advanced controllers, the simplest to operate, Fusion4 frees your operation to get more done, more quickly, more efficiently. Scalable and versatile, it brings intelligent control to any operation.

A Smarter User Experience

Our unique user experience is designed for the way people work. Taking its cue from smart phone and tablet computing "apps", self-explanatory graphical on-screen icons drive easy access to all operations and functions.

Developed for a truly intuitive experience, it helps you cut training times, eliminate human error and boost productivity. Highly configurable and with multiple language support, it's made for your operation, giving users unparalleled insight and control.

With a consistent look and feel across the portfolio, it's a simpler approach to sophisticated control.

See More, Do More,

With a 3.5" or 8" (for the MultiPak and MSC-L) color screen, Fusion4 gives you visibility where you need it. Supporting multiple languages, including Chinese and Japanese characters, drivers and others can fully control and monitor the operation from the load rack.

Configurable, dynamic displays let you determine the details shown for the ultimate, user-friendly experience. With operators able to drill-down for an unparalleled level of system information, it promotes better decisions for a more efficient operation.

Precise and Compliant

Fusion4 is designed for market leading accuracy, helping you monitor and control more critical operational parameters, more precisely to eliminate waste and protect your high value products.

Approved for use in hazardous areas and with powerful alarm handling, the controllers are built for safety. Able to meet the requirements of the EU Measuring Instrument Directive (MID) and NTEP, amongst others, it also delivers for weights and measures approved custody transfer applications, while the Calibration Wizard automatically captures every record for greater traceability and security.

A Lower Cost of Ownership

The controller range is focused on efficiency. Smart, powerful features and a modular design help you do more with less, driving down capital and operational expenditure.

- More streams: Monitor 12 streams with the Fusion4 MultiPak (expandable to 24 in future) and six loading arms with the MSC-L. Fusion4 means fewer, more powerful devices.
- Modular upgrades: Common building blocks add more functionality for sophisticated operational requirements and the definitive scalable solution.
 Common parts used across devices optimize inventories for spares.
- Optimized system connectivity:
 Plug and play connectivity to Honeywell Terminal Automation Solutions, Load Computers and the Fusion4 Portal software suite, as well as 3rd party systems using protocols such as Modbus TCP/IP to protect investments.
- Fast installation and set up: Start ups in under a minute, quick configuration, the Calibration Wizard and configurable I/O get you working quicker.
- Easier maintenance: Keep operations reliable with zero-downtime firmware upgrades and real-time diagnostics.

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A Powerful Portfolio



The Fusion4 range provides a complete solution for loading, blending and additive injection. A common look and feel across the range reduces training requirements and errors. Wide-ranging integration capabilities offer plug and play expansion and scalability.

Fusion4 MSC-L: Control At the Heart of the Operation

A large, full-color display and keyboard combine with our icon-driven interface for the most powerful weights and measures approved loading control solution on the market. Control up to six loading arms simultaneously with blending and additives.

With the intuitive app-based interface drivers are easily steered through identification, and entry of vehicle information, product and recipe details, as well as batch control. FlexFlow – a configurable workflow function – even allows customer-specific operational sequencing. The large screen facilitates at-a-glance monitoring of all operations.

MSC-L combines seamlessly with others systems in the Fusion4 portfolio to add blend streams and additive injectors.

Fusion4 MultiPak: No More Dumbing Down

The most advanced dedicated, hazardous area, multi stream additive controller in the world, the MultiPak puts you back in control of the operation. The simple interface gives access to rich, clear information on the transfer operation. Have full visibility and insight on precision, traceability and security. Detailed transactional data, alarms, diagnostics and calibration event logging provide a secure paper trail for business and regulatory auditing.

With process monitoring and control for up to 12 streams at the load rack simultaneously and capability for extension to 24 streams in future, users can choose from a stand-alone device (the MSC-A) or a complete package coupled with additive injection hardware for off-the-shelf additive solution. Use with the Local Access Device (LAD) for live data transfer in hazardous areas.











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Fusion4 MiniPak: Zero in Accuracy

Get precision single stream additive control and the Fusion4 user experience with the MiniPak. Our industry standard MonoBlock metering and control manifold is paired with the Single Stream Controller (SSC). Designed exclusively to manage chemical injection, the SSC continuously monitors the additive volume, maintaining the correct ratio throughout the transaction.

Providing unmatched accuracy, reducing giveaways and saving you money, MiniPak is suitable for a wide range of applications: performance enhancing additives; dyes & markers; lubricity enhancers; No_x reduction additives; anti static additives; cold flow enhancers; anti-foaming agents; anti icing additive; detergent additives; and lead replacement.



For biofuel blending at the load rack Fusion4 BioBlend's proprietary algorithm delivers the highest possible blending accuracy to reduce off-spec blends, cut costs and ensure compliance with the EU Measuring Instruments Directive and US RFS2.

Easy to use but offering sophisticated control, the SSC coupled with application-specific, designed blend streams is suitable for blending Ethanol, Bio Diesel, Butane Mid-grade fuel, Chemicals and Fertilizers.

Fusion4 Microblender: Excellence in Single Stream Blending

The single stream blender offers precise control in a highly configurable, compact package. On-spec product and compliance with international regulation comes as standard, with comprehensive, Weights and Measures compliant transaction and calibration records for customer and regulatory audits.

The controller can store 10,000 transaction logs, 128 alarm logs and 100 calibration logs.

Powerful Features Across the Range

Fusion4 user experience.

Unique icon-driven interface:
Almost no training required with the

Advanced alarm handling: Monitors nearly twice as many parameters as any other device.

Real-time diagnostics: Diagnostics dashboards for fast identification of problems.

Live data transfer: Even in hazardous areas using the LAD.

Configurable I/O: Assign any function to any input or output.

Calibration Wizards: Capture and record every calibration record.

Fast start up: Get going in under 60 seconds.

Multiple language support:

Includes English, Chinese, Japanese, French, Spanish, Portuguese, Italian, Dutch, German, Polish and others.



Smart, powerful features and a modular design help you do more with less, driving down capital and operational expenditure.



More Functionality

Increase functionality using Fusion4 Portal software and LAD.

The Fusion4 LAD

With the LAD users benefit from the first device in the world capable of live data transfer in hazardous areas. Safe, secure two-way data communication allows rapid transfer of transaction data, configuration files and calibration records.

Use the LAD to adjust parameters, reset alarms, upload language packs and calibrate devices, as well as complete no downtime firmware upgrading in the field. The removable SD card makes safe area data transfer easy.

Trust Us

- Over 60 years experience in terminal operations
- Over 100,000 injectors sold worldwide
- A pioneer in smart additive injection and blending
- Solutions for every application
- Local support with global expertise
- Single source provider with wide portfolio

Fusion4 Portal

Use our software suite for remote monitoring and configuration of hazardous area devices. The Portal suite facilitates remote management by operators and supervisors via Ethernet or Serial comms, for centralized control and the highest standards of reliability.

Available as a modular package, users can bundle together only the functions they require into a common on-screen dashboard.

- The Print Module provides all reconciliation printing functions to radically cut the paperwork burden: W&M approved bill of lading printing, transaction printing, scheduled prints, and summary prints, as well as configurable free form data entry supporting localized languages.
- The Monitor Module gives a real time audit trail of each and every device transaction for simplified compliance and reconciliation, as well as alarm and a comms monitoring and management panel for rapid identification and pinpointing of faults. The Live Viewer function allows the operator to view any field devices in real-time on screen at the click of a mouse.
- The Configuration Module permits remote uploading and downloading of individual or complete device parameter settings from the Portal dashboard to get the operation working quicker.

Terminal Manager and TM Box

The Fusion4 portfolio seamlessly integrates with Honeywell's Terminal Manager (TM) and Experion® to form the basis for a complete terminal automation solution.

Capable of utilising both industry standard and proprietary protocols, the Fusion4/TM solution provides customers with advanced features out of the box:

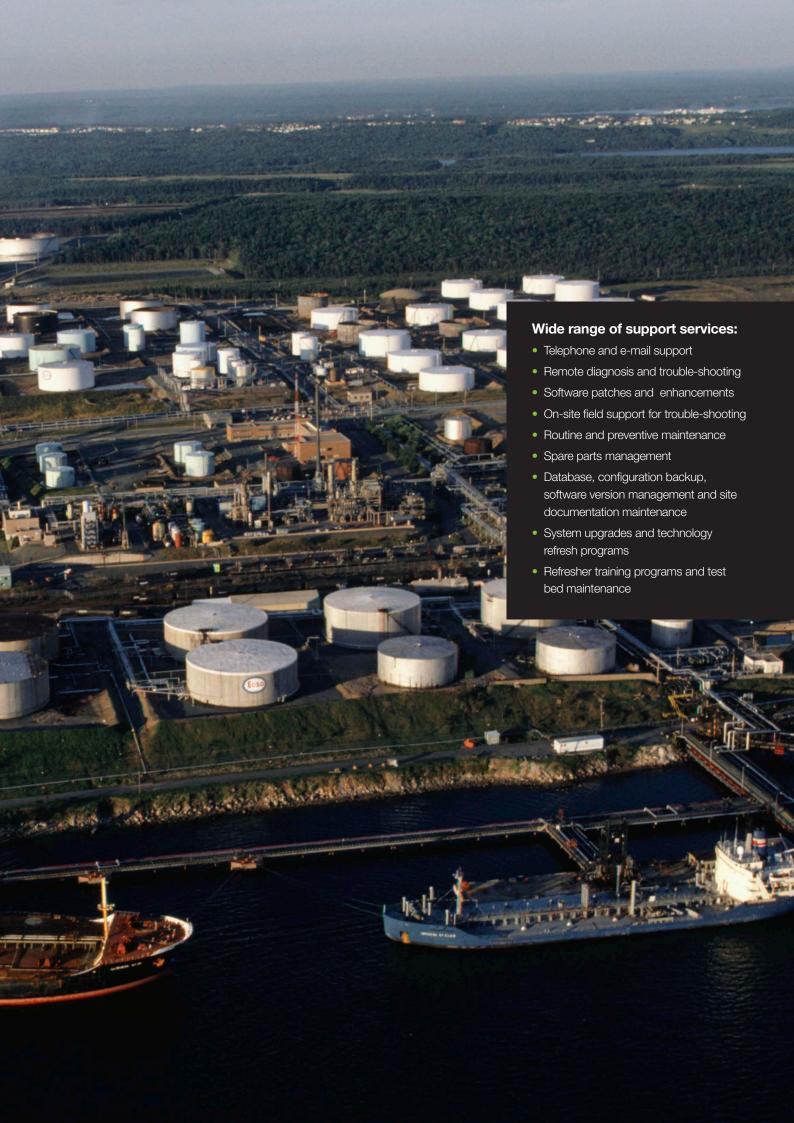
- End-to-end functionality, from order processing to inventory management
- An advanced configurable workflow engine
- Support for all transport modes (road, rail, marine and pipeline)
- Full Unicode functionality for global language support
- Wide ranging functionalities, including product allocation, reconciliation, transfer agreements, and email and SMS notifications

Designed from the ground up to provide effortless connectivity and unparalleled operator benefits, Fusion4 with Terminal Manager is the ultimate scalable solution.

A Wider Offering

Use us as your single source for automated loading and unloading and draw on a comprehensive and integrated portfolio of products, systems and services that add value.

Our expertise encompasses load computers, fuel management software, additive injection, blending and access control. Integrated, scalable and expertly applied, Honeywell Enraf solutions provide accurate, resilient answers for tighter control, increased availability and highly traceable operations.



For More Information

To learn more about Honeywell Enraf's Fusion4 products contact your Honeywell Enraf account manager or visit www.honeywellenraf.com

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