

MCG 3281

Mini Field Interface Unit

Terminal operators, automation engineers, system integrators, and EPCs at small or mid-size tank facilities need Tankway connectivity without paying for a full Field Interface Card Rack built for 100+ devices. The MCG 3281 Mini Field Interface Unit is the compact alternative: a bridge between L&J Tankway field instruments — including the MCG 2000MAX, MCG 1600SFI radar, MCG 1500SFI servo, and evo 2600 radar gauge — and the host computer or inventory management system. When paired with the inventory platform, it unlocks full Tankway capability including remote parameter configuration, firmware upgrades, and detailed field diagnostics. Built-in surge protection and a compact form factor simplify installation and reduce panel space. Unlike the 3210i rack designed for large terminals, the 3281 sizes for the small-to-mid site.

Key Features

Compact Interface Design Eliminates the need for large interface racks, reducing panel space requirements and lowering installation costs for smaller tank gauging systems.	Full Tankway Functionality Enables remote configuration, software upgrades, and advanced diagnostics when used with L&J Tankway-enabled field devices and host systems.	Surge Protection Built-in surge suppression protects sensitive electronics from transient field voltages, improving system reliability and reducing downtime.
Flexible Communications Supports multiple host and field communication options, allowing straightforward integration with standard serial networks and control systems.	Scalable Architecture Supports different power and Tankway current options, allowing expansion from small installations to systems supporting up to 25 tanks.	Proven Ecosystem Compatibility Designed specifically for L&J gauges, transmitters, and inventory software, ensuring predictable performance and long-term system stability.

Typical Applications



SMALL TANK FARMS

Centralizes communication for five to twenty-five field devices without requiring a full interface rack or complex infrastructure.



SYSTEM RETROFITS

Enables modern digital Tankway communication while extending the usable life of existing L&J field instruments.



INVENTORY MANAGEMENT SYSTEMS

Connects field devices to inventory management software, enabling centralized monitoring, diagnostics, and remote configuration capabilities.



PROTOCOL BRIDGING

Provides reliable communication between Tankway field devices and standard serial host networks such as RS-232 or RS-485.



FIELD SIGNAL ISOLATION

Supports isolation and signal splitting features that improve system robustness and protect control-room equipment.



TERMINAL EXPANSION PROJECTS

Allows additional tanks and instruments to be added incrementally without redesigning the entire communication architecture.

Benefits



Lower Infrastructure Cost

Compact design removes the need for large racks, reducing hardware, panel space, and installation expenses in smaller installations.



Improved System Reliability

Integrated surge suppression protects against electrical disturbances, helping maintain continuous operation and data integrity.



Simplified Maintenance

Mini interface design allows faster troubleshooting and replacement without disrupting the entire tank gauging system.



Flexible System Growth

Multiple power and Tankway current options support gradual expansion as additional tanks and devices are added.



Consistent Data Integrity

Purpose-built Tankway communication ensures stable, accurate data transfer for inventory management and reporting.



Seamless L&J Integration

Designed to work natively with L&J gauges, transmitters, and software for predictable performance and reduced integration risk.

Technical Specifications & Key Features

Form Factor:	Mini field interface, compact housing
Communication:	Supports L&J Tankway (standard), optional Modbus/other protocols
Capacity:	Supports multiple field devices, scalable for small-to-mid installations
Power Supply:	110/220 VAC options
Protection:	Built-in surge suppression
Mounting:	Wall or panel-mounted, small footprint
Integration:	Fully compatible with MCG 3905 Inventory Management MCG7030 and MCG 3630 Touch Panel systems
Certifications:	Designed for safe use in hazardous environments (UL, ATEX, CE options depending on configuration)

Dimensions

Typical System Layout

Model Number Selection

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Summary

With over 100 years in tank measurement and safety systems, Cognesense is trusted worldwide for reliability and support. The MCG 3281 Mini Field Interface Unit continues this legacy by delivering a cost-effective, compact communication solution that fits seamlessly into modern and legacy infrastructures alike. By choosing Cognesense products, operators gain not just a device, but a long-term partner committed to safeguarding inventory, compliance, and operational uptime.

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