

MCG 1095



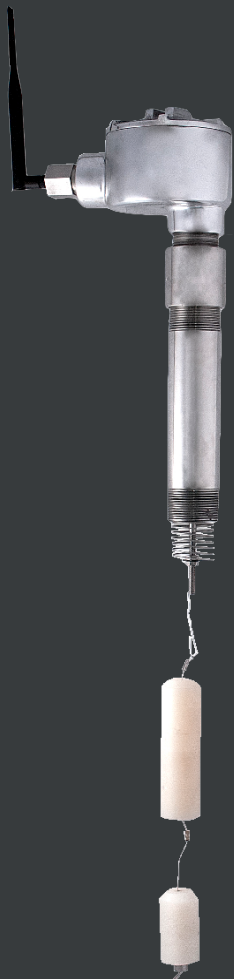
L&J Technologies

A COGNESENSE BRAND

Wireless Level Alarm Probe

Designed for terminal operators, tank farm supervisors, safety engineers, compliance managers, and EPCs, the MCG 1095 delivers wireless, fully self-testing overfill protection for hazardous liquid storage. Unlike typical alarm probes that verify only electronics, the MCG 1095 physically moves the displacer to confirm mechanical and electrical integrity, ensuring alarms operate when real process conditions occur. Wireless communication powered by an extended-life lithium battery eliminates wiring costs and enables rapid deployment across distributed or remote assets.

Regular testing is critical because alarm probes often remain idle for long periods. The 1095 supports automatic, remote self-checking when paired with the MCG 7030 Alarm Monitor. It continuously reports alarm conditions and battery status using our secure wireless protocol, helping operators avoid unexpected failures. Simplified mechanics, stainless-steel construction, and optional displacer materials provide long-term durability. By combining proven reliability, reduced maintenance, and compliance with state fire code requirements for independent alarms, the MCG 1095 provides a dependable, low-cost method for protecting tanks that store hazardous, flammable, or high-value liquids.



Key Features

True Mechanical Verification

Performs complete self-testing by physically lifting the displacer, confirming actual alarm functionality rather than simulating only electrical signals.

Wireless Alarm Reporting

Eliminates wiring through a secure, battery-powered wireless link, sending real-time alarm updates and diagnostics over long distances.

Remote Auto-Testing

Enables automated periodic self-checking from the control room via the MCG 7030, improving reliability without requiring onsite access.

Fire Code Compliance

Meets strict state requirements for independent overfill alarms, supporting safe storage of flammable and hazardous liquids.

Continuous Battery Monitoring

Regularly checks battery status and sends immediate alerts if power becomes low or abnormal operating conditions occur.

System Integration Ready

Interfaces seamlessly with MCG 7030 and MCG 3900 systems for alarm logging, reporting, automated testing, and facility-wide visibility.

Typical Applications



OVERFILL PROTECTION

Ensures dependable high or high-high alarms that prevent spills, reduce environmental risk, and maintain compliance across tank storage facilities.



PUMP/VALVE CONTROL

Provides reliable alarm-triggered actuation that protects pumps and valves from unsafe levels and prevents product loss or equipment damage.



REGULATORY COMPLIANCE

Supports fire-code mandated independent alarms, lowering operational risk and simplifying safety audits for hazardous storage operations.



REMOTE TANK FARMS

Wireless architecture minimizes installation cost and complexity for distant tanks where trenching or cabling is impractical or expensive.



CRITICAL LIQUID STORAGE

Protects hazardous or valuable chemicals, fuels, and crude oils with verified alarm performance that avoids costly and dangerous releases.



RETROFIT INSTALLATIONS

Ideal for updating older tanks, providing modern alarm reliability and wireless operation without modifying existing infrastructure or wiring.

Benefits



Reliable Alarm Assurance

Self-testing verifies full mechanical operation, preventing silent probe failures and reducing the likelihood of costly spills or shutdown events.



Reduced Maintenance Work

Remote testing capability minimizes ladder climbs, tank entry, and routine site visits, lowering labor costs and improving worker safety.



Enhanced Site Safety

Wireless operation eliminates wiring hazards and enables safe validation of alarms without exposure to hazardous environments.



Faster Installation

Battery-powered wireless design installs quickly, reducing commissioning time and avoiding high wiring or trenching expenses.



Seamless Integration

Works directly with L&J monitoring systems for automated reporting, alarm analytics, and centralized operational oversight.



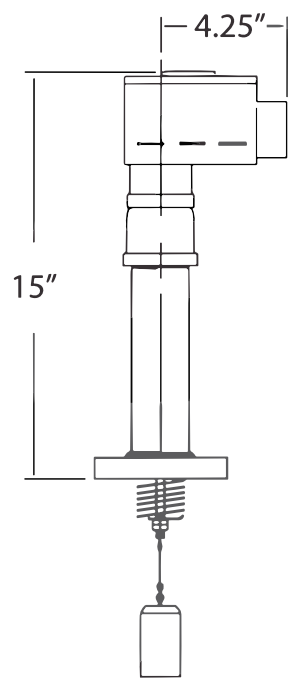
Durable Construction

Stainless steel housing and optional nylon or graphite displacers provide robust performance in corrosive, dirty, or challenging conditions.

Technical Specifications & Key Features

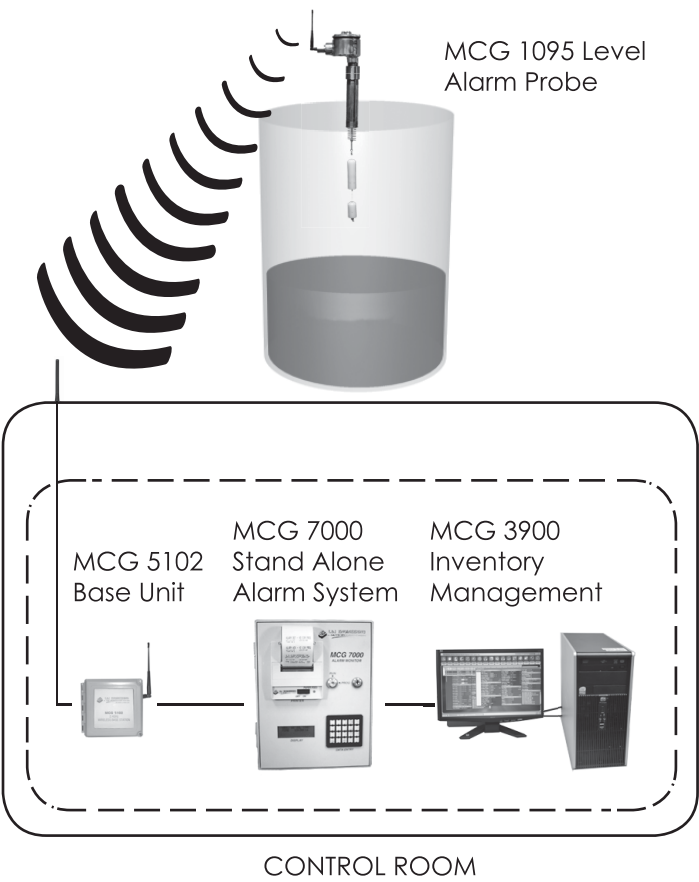
Mounting Connections	1-1/2" or 2" NPT; 1-1/2", 2", 4" or 6" Flanges
Alarms:	Hi, Hi-Hi, Lo
I/O:	NC/NO, L&J, NC/NC (5V, 100 mA)
Self-Testing:	Automatic (L&J Tankway), Manual (24 VDC), or None
Materials:	304 SS Housing (Std.), Nylon Displacer (Std.); Optional 316 SS or Graphite Displacers
Power:	Lithium battery (1+ year life)
Integration:	Compatible with MCG 7030 Touch Panel Alarm Monitor and MCG 3900 Inventory Management System
Safety/Compliance:	Meets state fire code requirements for independent alarms

Dimensions



Wireless Stand Alone
High Level Monitoring System

Typical System Layout



Model Number Selection

The model number will consist of a base number MCG 1095 followed by 10 digits.
These digits will represent 6 option tables:

AB • BODY SIZE / LENGTH	
10	1.5" body; 10 ft. (3 m) of 302 SS Cable
12	1.5" body; 30 ft. (9.1 m) of 302 SS Cable
21	2.0" body; 10 ft. (3 m) of 302 SS Cable
22	2.0" body; 30 ft. (9.1 m) of 302 SS Cable
31	1.5" body; 10 ft. (3 m) of 316 SS Cable
32	1.5" body; 30 ft. (9.1 m) of 316 SS Cable
41	2.0" body; 10 ft. (3 m) of 316 SS Cable
42	2.0" body; 30 ft. (9.1 m) of 316 SS Cable

C • MOUNTING	
0	Special
2	1.5" 304 Stainless Steel Body
3	2.0" 304 Stainless Steel Body



D • CONNECTIONS	
1	1.5" NPT (No Flange)
2	2.0" 300 lb. RF Flange (304 Stainless Steel)
3	2.0" NPT (No Flange)
4	1.5" 300 lb. RF Flange (304 Stainless Steel)
5	6.0" 150 lb. RF Flange (304 Stainless Steel)
6	2.0" 150 lb. RF Flange (304 Stainless Steel)
7	4.0" 150 lb. RF Flange (304 Stainless Steel)
8	6.0" 300 lb. RF Flange (304 Stainless Steel)
9	4.0" 300 lb. RF Flange (304 Stainless Steel)

S.G. = Specific Gravity Range of Product
* Need Dual Displacer for Hi and HiHi Alarms.

EF • COMM. TYPE/CHECKER	
02	Remote Checker

GH • I/O CONFIGURATION	
10	Explosion Proof Antenna

I J • DISPLACER SIZE AND CONFIGURATION	
00	1.5" Nylon Single Displacer (S.G.: .65-1.0)
01	1.5" Nylon Dual Displacer (S.G.: .65-1.0)
04	1.5" Nylon Single Displacer (S.G.: .50-.80)
05	1.5" Nylon Dual Displacer (S.G.: .50-.80)
20	1.5" 316 S.S. Single Displacer (S.G.: .65-1.0)
21	1.5" 316 S.S. Dual Displacer (S.G.: .65-1.0)
24	1.5" 316 S.S. Single Displacer (S.G.: .50-.80)
25	1.5" 316 S.S. Dual Displacer (S.G.: .50-.80)

Summary

With more than 100 years of experience in tank measurement and safety, Cognesense continues its tradition of innovation and reliability. The MCG 1095 Wireless Level Alarm Probe exemplifies this legacy, offering the industry's only truly complete self-testing wireless alarm solution. By choosing Cognesense, you gain more than just a probe , you secure a proven partner dedicated to protecting your operations, your compliance, and your bottom line.

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