



WATER & WASTEWATER

APG Product Catalog

AT APG, WE'RE DEDICATED TO YOUR SUCCESS

We design and manufacture innovative level and pressure sensors to solve real-world, niche problems across industries. APG's mission is to design, develop, and manufacture top quality and highly valued industrial measurement equipment and data service.

APG sensors are trusted in applications across many industries, including:

- Water/Wastewater
- Food & Beverage
- Chemical & Petrochemical
- Mining & Minerals
- Medical & Pharmaceutical
- Aerospace
- Oil & Gas
- Car Wash
- Agriculture

As an **ISO 9001:2015-certified manufacturer**, quality is at the heart of everything we do. We believe our success is tied to yours—because when you thrive, we thrive.

How can we help solve your level or pressure measurement challenges?

CONTENTS

FLOAT SWITCHES	2
Cable-Suspended	3
LEVEL TRANSMITTERS	4
Ultrasonic Level Sensors	4
Radar Level Transmitters	7
CONTROLLERS & DISPLAYS	8
Settler & Explorer	10
Modbus Scout	11
SUBMERSIBLE PRESSURE TRANSMITTERS	12
DIGITAL PRESSURE GAUGES	13

Our solution experts are ready to assist you.

Phone, Email, or Live Web Chat: Monday–Friday, 8 AM to 5 PM MT

Connect with Us: LinkedIn, Facebook, YouTube, Instagram

You can also visit our website and fill out our Contact Us form anytime.

At APG, we're here to support you every step of the way.

FLOAT SWITCHES

An APG float switch can be found for almost every situation because of the variety of materials, configurations, and capabilities they have. Whether complicated or straight-forward, small vessels or large reservoirs, common liquids or really aggressive chemicals, there is an APG float switch fit for the job.



FS-400



Vertical Stainless Steel Float Switch

All stainless steel wetted materials, operating temperatures up to 500° F, and capable of VDC or VAC operation.

● * | **Temp. Range:** -40°F–500°F | **Specific Gravity:** 0.6



FS-410



Miniature Vertical Float Switch

Designed to measure small spaces, the FS-410 is less than 2.35 in. in total height and the float is just under 1.2 in. wide.

● * | **Temp. Range:** -40°F–500°F | **Specific Gravity:** 0.7



FS-500



Stainless Steel Horizontal Float Switch

With reversible switch orientation, three mounting choices, and CSA & NSF 169 certifications, the FS-500 switch is the go-anywhere, use-everywhere float switch.

● * | **Temp. Range:** -40°F–500°F | **Specific Gravity:** 0.6

*Above models are no longer Explosion Proof when configured in the High Temp (HT) model option (over 187°C).

CABLE-SUSPENDED

KA (KARI) FIG. 1

Single Float Switch

A single Kari float allows up to four switch points in a single float, saving you money by replacing four single-level float switches. The sensors are durable, highly chemical compatible, and come in 25 configurations, most with built-in hysteresis.

Cable Length: 16 ft. 49 ft. and Custom | **Switch Points:** Up to 4 NO/NC
Enclosure Protection: IP67, NEMA 6

CS



FIG. 1

FT-100/300 FIG. 2

CS

Single-Point Float Switch

This inexpensive, traditional single-point switch is ideal for simple alarming applications. The sensors trigger immediately above or below horizontal, for a highly repeatable performance that you can count on.

Cable Length: 20 ft. and Custom | **Switch Points:** 1 NO/NC; 1 SPTD

TLS FIG. 3

Dual-Point Float Switch with Hysteresis

The TLS series cable switches are dual-point switches with built-in hysteresis to provide high and low-level control that won't wear out pumps with frequent on/off cycles.

Cable Length: 20 ft., 40 ft., 60 ft. | **Switch Points:** NO/NC
Enclosure Protection: IP68



FIG. 2



FIG. 3

LEVEL TRANSMITTERS

Ultrasonic sensors are our workhorse level sensors because they perform well in so many places and environments. Ultrasonics are great for almost all tank-level measurement applications, open channel flow calculations, and monitoring reservoirs, retention pond, or dam tail waters. They do well for object detections/profiling in car wash systems, and can be programmed to provide distance, level, or volume output readings.

ULTRASONIC LEVEL SENSORS

Ultrasonic sensors are ideal for tank-level monitoring, sump control, and flow measurement in oil and gas operations. They offer reliable, non-contact measurement with programmable outputs for distance, level, or volume.



IRU-2420



Non-Incendive Mid-Range Sensor

The IRU-2420 series provides a non-contact method of detecting distance or proximity, with on-board level or volume calculations.

Range: 1-25 ft. | **Output:** 4-20 mA; 4-20 mA w/ 2 NPN trip points | **Enclosure Protection:** IP65



IRU-3430



Non-Incendive Long-Range Sensor

With built-in technology to compensate for unpredictable variables, the IRU-3430 is designed to excel in long-range applications, like crane collision-avoidance.

Range: 1.25-50 ft. | **Output:** 4-20 mA; 4-20 mA w/ 2 NPN trip points | **Enclosure Protection:** IP65



IRU-5000



Non-Incendive Short-Range Sensor

IRU-5000s have the smallest blanking distance in APG's ultrasonic sensors at 4 in., making them perfect for precise use in tight quarters, such as small container level measurement.

Range: 4-79 in. | **Output:** 4-20 mA; 4-20 mA w/ 2 NPN trip points; 0-2.5V, 0-5V; RS-232 | **Enclosure Protection:** IP65



MNU-IS



Intrinsically Safe Modbus Sensor

MNU-IS offers Intrinsically Safe, power-saving ultrasonic sensing with QuickMode, optional surge protection, and easy RS-485 Modbus integration.

● | **Range:** 5 in.–25 ft. | **Output:** Modbus RS-485
Enclosure Protection: IP68 (M12 connector only rated IP67)



MNU

Web-Enabled Modbus Sensor

Built for any Modbus application, the MNU is compatible with any Modbus controller and can be monitored online when paired with Settler and Explorer.

Range: 4 in.–40 ft. | **Output:** Modbus RS-485
Enclosure Protection: NEMA 6P



LOE



Web-Enabled Sensor & Controller

Designed for remote measurement, the LOE series connects to the internet to provide online monitoring via APG's Explorer.

Range: 7 in.–40 ft. | **Output:** TCP/IP; Up to 2 Isolated Solid State Relays (120V / 120 mA max) | **Enclosure Protection:** IP65



LPU-2127



Built-In Keypad & Display

The LPU-2127 features an LCD display for easy programming performed entirely through the built-in keypad.

Range: 1–25 ft. | **Output:** 4–20mA; 600 ohms @ 24 VDC; 150 ohms @ 12 VDC | **Enclosure Protection:** IP65



LPU-2428



Intrinsically Safe, Loop-Powered

Made for highly configurable measurement in linear and non-linear tanks and channels, the LPU-2428 can internally calculate distance, level, open-channel flow, or volume.

Range: 1-25 ft. | **Output:** 4-20 mA | **Enclosure Protection:** IP65



IRU-2000



For Object Detection

IRU-2000 Series ultrasonic sensors are ideal for presence/absence detection, proximity detection or measurement, object profiling, and more.

Range: 1-25 ft. | **Output:** 1 SSR; Isolated 4-20 mA; RS-485 w/ 1 NPN trip point; 4-20 mA w/ 2 NPN trip points | **Enclosure Protection:** NEMA 4X



IRU-6429



Datalogger Compatible

The IRU-6429 features auto-sense software for quick and easy programming, and an excitation input for datalogging.

Range: 1-30 ft. | **Output:** 0-2.5V, 0-5V; RS-232
Enclosure Protection: IP65

RADAR LEVEL TRANSMITTERS

Radar sensors use electromagnetic waves, not physical sound waves like ultrasonics, to measure distances. This makes them ideal for challenging materials. TRUE ECHO® Radar Level Transmitters further enhance performance by ignoring echoes from physical interferences, delivering clearer readings with lower power.



PRL



Pulse Radar for Liquids

The PRL provides accurate level readings from all types of liquid level measurement, including oil-water interface measurement via additional firmware.

Range: 1-100 ft. | **Output:** 4-20 mA (shared common or isolated); HART 7; RS-485; RS-232
Enclosure Protection: NEMA 6

TRUE ECHO® Series



TRUE ECHO® CR-L



Liquid Radar Level Sensor

The TRUE ECHO® CR-L brings the accurate level readings of radar sensors to industrial liquid measurements. It can accurately measure in many adverse environments. The radar's narrow beam can detect small targets and achieve precise positioning with high resolution.

Range: 7.87 in.-49.21 ft. | **Output:** 4-20 mA; RS-485 | **Enclosure Protection:** IP67



TRUE ECHO® PLUS

Radar + Pressure Dual Sensor

The TRUE ECHO® Plus dual sensor combines radar and pressure sensing into one powerful device. From overfill and flooding to rapid level changes, it delivers accurate, real-time data with seamless redundancy between technologies.

Radar Range: 8 in.-49 ft. | **Pressure Range:** 0-30 psia | **Output:** Modbus/RTU

CONTROLLERS & DISPLAYS

APG's controllers and displays simplify remote applications by supporting up to 10 Modbus sensors with centralized monitoring. With features like sensor power supply, easy programming, and tank level management, they're ideal for standalone and compact setups.



MND

Modbus Digital Display

Local display that works with up to 10 sensors as a server, client, or power source on any Modbus network.

Input: Modbus RTU | **Output:** 4-20 mA; 0-3V; 1 SPDT Relay; 2 NO or NC Relays | **Enclosure Protection:** IP67/IP68



MDI

Intrinsically Safe Modbus Display

CI, ZI display that can power and control a CI, ZO or CI, ZI sensor, with optional passive connection to external monitoring network.

• | Range: Up to 5,000 psi | **Output:** mV/V





DDD/DBD

Din Mounted Digital Display

Din Mounted Digital/Bright Displays provide highly configurable, 2-line displays with NEMA 4X / IP65 front facing ratings.

Input: 0-20 mA, 4-20 mA; 0-5 VDC, 1-5 VDC, 0-10 VDC | **Output:** 0, 2, or 4 SPDT Relays; Isolated 4-20 mA | **Enclosure Protection:** NEMA 4X, IP65



DDL

Large Digital Display

The DDL features 2.8 in. digits readable from 100 ft. with high intensity LED's for direct sun visibility, and a NEMA 4X/IP65 rated enclosure.

Input: 0-20 mA, 4-20 mA; 0-5 VDC, 1-5 VDC, 0-10 VDC | **Output:** 0, 2, or 4 SPDT Relays; Isolated 4-20 mA points | **Enclosure Protection:** NEMA 4X, IP65



LPD

Loop-Powered Display

The LPD features a simple three-button interface with a large LCD and supports optional Modbus RTU programming for easy setup.

Input: 4-20 mA | **Output:** 4-20 mA; RS-485 | **Enclosure Protection:** IP67, IP68



DCR-1006A

Full Controller with 4 Relays & Signal Outputs

The DCR-1006A is a capable stand alone controller for select APG Modbus level sensors.

Input: MNU/MPX Sensor (RS-485), DST Sensor, 1 Dry Contact | **Output:** 4 Relays, 4-20 mA, RS-485 (Modbus RTU) interface | **Enclosure Protection:** NEMA 4X, IP66

SETTLER & EXPLORER



REMOTE MONITORING GATEWAY & SOFTWARE

Settler is a powerful remote monitoring gateway that works worldwide, effortlessly collecting and transmitting data from any Modbus and 4-20 mA sensor to APG's Explorer platform via MQTT with AES (Advanced Encryption Standard). With reliable Ethernet connectivity, and easy setup, and the ability to monitor anything, it ensures real-time insights, robust data security, and seamless industrial monitoring.

Temp. Range: -20° to 85°C (-4° to 185°F) | **Input/Output:** Modbus RS485 input; 4x 4-20 mA analog inputs (active loop power provided)
Enclosure Protection: IP40

*Settler is not intended for use in hazardous environments.

MODBUS SCOUT (SCT-1)



PORTABLE RS485 MODBUS COMMUNICATOR

Modbus Scout is a compact RS485 Modbus communication device. The simple design allows users to connect to their Modbus sensor in the field via an easy-to-use app or a convenient USB port. Additionally, Modbus Scout can broadcast simple readings to the app, so users can quickly check the status of several devices within range at once.

Operating Temp.: -18° to 60°C (0° to 140°F) | **Broadcast Range:** Approximately 33 ft. (10 m) | **Interfaces:** Short-range wireless connectivity via APG Scout Communicator app; USB connectivity via APG Scout Communicator app; USB connectivity via virtual COM port

SUBMERSIBLE PRESSURE TRANSMITTERS

APG's submersible pressure transducers are incredibly versatile, often used in waste liquids. Their low current draw makes them popular for battery-powered applications. With our pressure transducers, you can get a pressure level reading inside a tank, well, containment vessel, or outside in areas prone to running or standing liquids.



PT-500-P1



For Clean Liquids

The PT-500-P1 for clean liquids offers unparalleled reliability and accuracy in industrial applications. Features field-adjustable zero for flexible and easy installation.

- | **Range:** 250 psi | **Output:** 4-20 mA; 0-5, 1-5, 1-10 VDC; mV/V; Modbus RS-485



PT-500-E



NSF/ANSI/CAN 61 & NSF/ANSI/CAN 372-Certified

The PT-500-E offers accurate and reliable level measurement in municipal water systems, reservoirs, and storage tanks. Its durable, corrosion-resistant design and multiple analog output options make it a dependable choice.

- Range:** Up to 575 ft. | **Output:** 4-20 mA; 0-5, 1-5, 1-10 VDC; mV/V; Modbus RTU



PT-500-P38/39



For Harsh, Dirty Liquids

The patented, welded cage on the PT-500-P38/39 is designed to protect the sensitive diaphragm in turbulent and dirty liquids. The cage is either removable and reusable, or permanently welded to the PT-500.

- | **Range:** Up to 575 ft. | **Output:** 4-20 mA; 0-5, 1-5, 1-10 VDC; mV/V; Modbus RS-485



PT-503

For Chemical Applications

The PT-503, made with durable PVDF, excels in harsh chemical environments with precise performance and unmatched reliability.

- Range:** 30 psig | **Output:** 4-20 mA; 0.5-4.5 VDC (Ratiometric)

DIGITAL PRESSURE GAUGES

Our digital pressure gauges deliver reliable, accurate readings in harsh environments. Designed without the fragile mechanisms of dial gauges, they withstand overpressure, vibration, and water hammer. Count on APG for dependable pump monitoring in any condition.



PG2

Low-Cost, Indoor/Outdoor Gauge

The PG2 digital gauge comes with auto-off and re-zeroing functions, user-selectable units of measure, and an easy to read display.

Range: Up to 5,000 psi | **Enclosure Protection:** IP65



PG5

Full-Feature Indoor Gauge

Serving as the foundation to our PG series of gauges, this full-feature, general purpose gauge is designed for accurate indoor pressure measurements.

Range: Up to 10,000 psi | **Output:** 4-20 mA; 0-2V, 0-5V



PG7

Rugged Full-Feature Gauge

The PG7 is a rugged full-feature gauge perfect for indoor and outdoor use.

Range: Up to 10,000 psi | **Output:** 4-20 mA; 0-2V, 0-5V



PG10

Large Display Gauge

The PG10 is our feature gauge with a large, 5-digit display, 270° radial bar, and datalogging.

Range: Up to 10,000 psi | **Output:** 4-20 mA; 0-2 VDC, 0-5 VDC; RS-485

NOTES

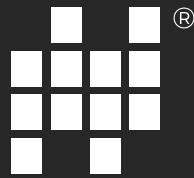


FIND MORE ONLINE

Visit our website:

apgsensors.com

Where you will find more product specifications, customization options, accessories, and more. Our knowledgeable sales team is ready to assist and help tailor a solution to meet your specific needs.



Automation Products Group, Inc.
Tel +1 (877) 373-5940 or (435) 753-7300

sales@apgsensors.com
apgsensors.com

Automation Products Group, Inc.
1025 W. 1700 N.
Logan, UT 84321

