

# SPECIFICATIONS

Model	Upper Range Limit	Min. Span	Accuracy	Overload Limit	Safety Limit
GP-30	30 PSIG	0.3 PSI	0.007 PSI	60 PSI	500 PSI
GP-250	250 PSIG	2.5 PSI	0.063 PSI	500 PSI	1,500 PSI
GP-1000	1000 PSIG	10 PSI	0.25 PSI	2,000 PSI	10,000 PSI
GP-5000	5000 PSIG	50 PSI	1.25 PSI	12,000 PSI	20,000 PSI
GP-23200	23206 PSIG	232 PSI	4.64 PSI	26100 PSI	29,000 PSI
AP-30	30 PSIA	0.3 PSI	0.007 PSI	60 PSI	500 PSI
AP-250	250 PSIA	2.5 PSI	0.063 PSI	500 PSI	1,500 PSI

## VR-1500 GP/AP SERIES HART® PRESSURE TRANSMITTER SPECIFICATIONS GAUGE & ABSOLUTE PRESSURE SENSORS

(Sensor assembly is complete with Explosion Proof Housing for mounting VR-1500 Electronics Module or RMT-KIT for Split Architecture Applications)

### ACCURACY

Digital: ± 0.07% of reading or the accuracy from the table above for selected sensor, whichever is greater.  
Analog: Digital Accuracy ± 2µA. Accuracy includes hysteresis, linearity, and repeatability of both the sensor and transmitter at reference conditions.

### STABILITY

Combined Zero and Span Stability:  
Less than ±0.1% of sensor URL per year at 70°F.

### COMBINED ZERO & SPAN TEMPERATURE EFFECT

Less than ±0.07% of Span per 50°F, between 32°F and 158°F ambient.  
Less than ±0.14% of Span per 50°F for other ambient temperatures in the operating range.

### OUTPUT

Analog: Two-wire, 4-20mA  
Digital: HART® simultaneous communication.

### OUTPUT RANGE ADJUSTMENTS

Non-interacting Zero and Full-scale:  
Analog Zero Adjustment: 100% of Sensor Range  
Analog Full-scale Adjustment: Normal or Reverse Acting  
Turndown Capability: 100:1

### OUTPUT MINIMUM SPAN

1% of selected sensor full-scale value.

### OUTPUT RESOLUTION

Analog: 2µA  
Digital: 6 significant digits.

### CUSTOM CURVE CAPABILITY

22-point user selectable via HART® Communications.

### DYNAMIC RESPONSE

Update Rate: 100 milliseconds, typical.  
Response to Step Change: 250 milliseconds (63% to one time constant), minimum.  
Start-up time: 7 seconds. Operation to specification, less than 30 seconds.  
Ambient Temperature Change: Self-correcting for ambient changes up to 20°C per hour.

### POWER & LOAD

Power Requirements: 12-42 VDC (no load)  
Load Limitations:  $R(K\Omega) = (V_{Supply} - 12 VDC) / (23mA)$

### TEMPERATURE LIMITS

Process Temperature: -40 to +250°F Steady State  
Ambient Temperature Sensor: -40 to +230°F  
Transmitter: -40 to +185°F  
Display: -4 to +158°F (Full visibility)  
-40 to +185°F (Reduced visibility)

### HUMIDITY LIMITS

0 to 100%

### DISPLAY

Optional plug in display with keyboard for local set-up

### HOUSING

Explosion proof housing with or without window; CSA and FM approved for Class 1, Div 1 & Div II Groups B,C,& D (certification pending)

### PROCESS CONNECTION

½" MNPT Standard, others optional

### MATERIALS OF CONSTRUCTION

Stainless Steel body and diaphragm

### VR-1500 HART® PRESSURE TRANSMITTER Transmitter VR-1500 / Sensor Model Number Options

DK-2 Two-line Plug-in Smart Display / Keyboard  
PY-2 2" Pipe yoke for XP-F series housings  
PB-2S 2" Pipe mount bracket for VR series sensor

### Split Architecture Applications

Remote Mounting VR-1500 Electronics Module away from sensor assembly  
RMT-KIT Terminal block for sensor head (XP-FG) for remote mounting VR-1500 Electronics Module up to 150 feet from sensor  
CABLE\_\_(ft) Specify cable length (in feet)

### Mounting / Enclosure Options for VR-1500 Electronics Module for Split Architecture Applications

XP-FG Explosion Proof Housing with Window  
XP-FN Explosion Proof Housing  
4X-BOX-4 NEMA 4X Box with Clear Cover, Accommodates up to 4 transmitters  
DIN-KIT (VR) DIN Rail Mounting Adapter

# PRESSURE transmitter

## PressureSaver



# Accutech

Smart Process Instrumentation

# Concerned about pressure measurement?

If performance is a concern, but you have tight budget parameters, we have good news for you—a robust pressure transmitter that's designed to fit your demanding application, withstand the toughest environments, day in and day out, and meet your budget, too.

## So if you want peace of mind...

Don't compromise. When it's time to order your pressure transmitter, choose the PressureSaver—the latest pressure transmitter in the Accutech SAVER line, and get guaranteed...

- Stability
- Accuracy
- Versatility
- Ease-of-use
- Reliability



## No excuses, no worries. Just forget it.

All SAVER products are manufactured by AIC, developers of pressure instrumentation for some of the world's most demanding OEMs—and all SAVER products come with a 3-year guarantee!

When you choose the PressureSaver transmitter from the SAVER line, you can stop worrying about the stability, the reliability, or the accuracy of your pressure transmitter. Enjoy peace of mind instead—and discover the durability of the PressureSaver, with its robust, field-proven design; the benefits of split architecture in hostile or hazardous environments; and the competitive advantages that result from the increased process efficiency.

## Cost-effective

The value of the PressureSaver lies on the unique combination of outstanding performance and low cost of purchase. These unusually reliable and robust products will very quickly pay for themselves by providing the features and benefits of a top-of-the-line instrument, while remaining economic to buy and to maintain.



## Easy set-up saves time.

Who has the luxury of unlimited time—and unlimited resources? Not in today's process plant! More often than not, your staff has to perform multiple functions, dividing their day among many different tasks. The PressureSaver line of pressure products takes your issues into account, and gives you instruments that need no watching, worrying or wondering.

- Automatic self-calibration removes reliability concerns.
- Robust field-proven design assures long, trouble-free life.
- Plug-in display option allows easy local configuration and reading.
- Split architecture enables remote mounting in hazardous locations, facilitates reading.
- 100:1 turndown results in extra efficiency and savings—one PressureSaver transmitter can cover many pressure ranges.

## A decision you can stand on.

Want top value—and complete peace of mind?

The PressureSaver won't disappoint you—no matter how tough the environment. Process temperature effect on the pressure reading is automatically adjusted; the combined system accuracy of the sensor and the transmitter provides true measurement, which results in high accuracy.

Want more?

A three-year guarantee proves we are confident about the performance of the PressureSaver pressure transmitter. Set it and forget it—it will give you top stability, accuracy, versatility, ease-of-use, and reliability, day in and day out.

## WHY TAKE CHANCES?

A demanding environment, and a tough application, are not the time to cut corners.

Find out why process plants across the country are switching to the PressureSaver from Accutech, when compromising is out of the question, but cost concerns are a reality.

## Proven performance.

Our reputation is your best guarantee. Proven performance is what keeps making Accutech the choice for tough applications or demanding environments. And the design and manufacture of our transmitters mean peace of mind for their users. The PressureSaver features:

- Convenient zero adjust
- Stability guarantee
- Custom linearization
- Digital ambient temperature compensation
- HART communications

# PressureSaver

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**Accutech**  
Smart Process Instrumentation