

PG1300 - DROP-IN PRESSURE SENSOR

WHAT IS A DROP-IN PRESSURE SENSOR?

It is a device that can measure the fill level of a water tank by measuring the hydrostatic pressure at the bottom of the tank. The higher the level, the higher the pressure. Normally this would require drilling a hole to fit a pressure sensor, but these drop-in sensors make it easy, as you can just drop them in over the side, submerging the entire sensor.

HOW IT WORKS

The level transmitter uses an internal sensor to determine the hydrostatic pressure of the liquid it is immersed in. The pressure is then converted to a 4-20mA loop current. The transmitter is calibrated to a specific height / pressure at the factory, which is then made available in the form of an 4-20mA analog signal. Currently available options include a 0-5m (PG1300-5) and a 0-10m option (PG1300-10). For example: The PG1300-10 (calibrated for 10m) will provide a 4mA output current in response to empty tank and 20mA will correspond to a depth of 10m. It is very important to note that this calibration is specifically for WATER at sea-level, you should expect different results if you are measuring, for example cooking oil. This is because the specific gravity of the measured liquid affects the hydrostatic pressure for a given depth. The GSM Commander can easily turn the 4-20mA analog signal into meaningful data, converting it to liters, percentage or whatever it is that makes sense in your specific application.



APPLICATIONS / BENEFITS

- Water tank level measurement
- Start / Stop pump based on tank level
- Get alerts if tank level stays low for too long or overflows

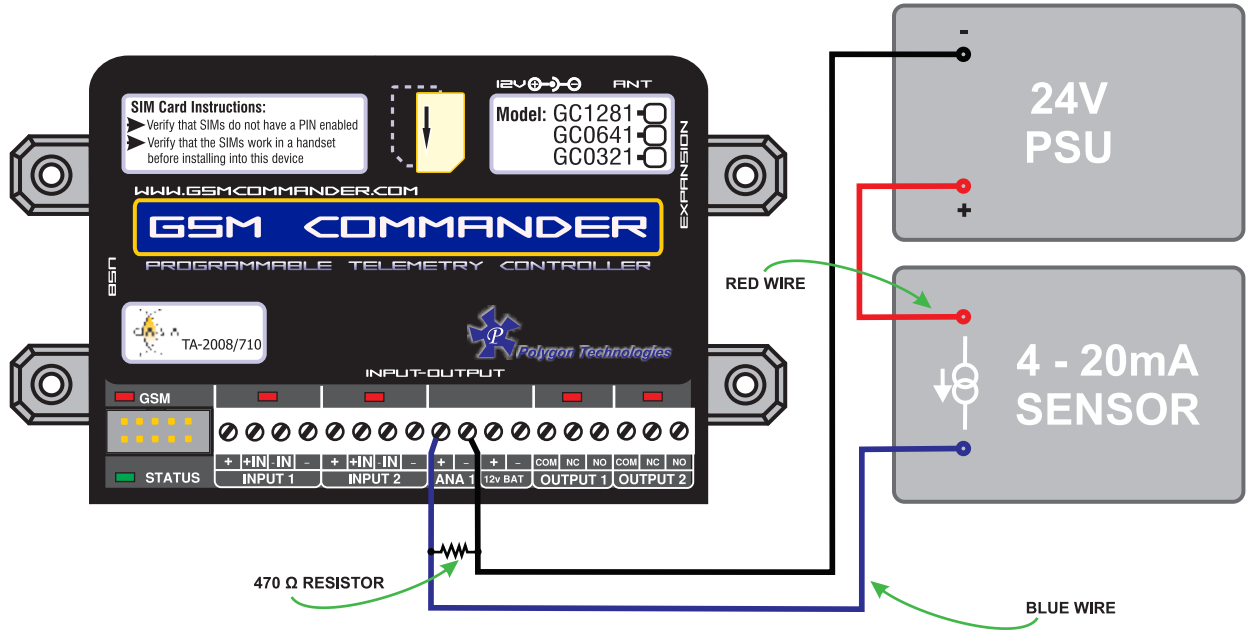
FEATURES:

- Submersible type, easy to use – no drilling required!
- Oil proof, waterproof stainless steel construction
- Permeable and hard wearing cable

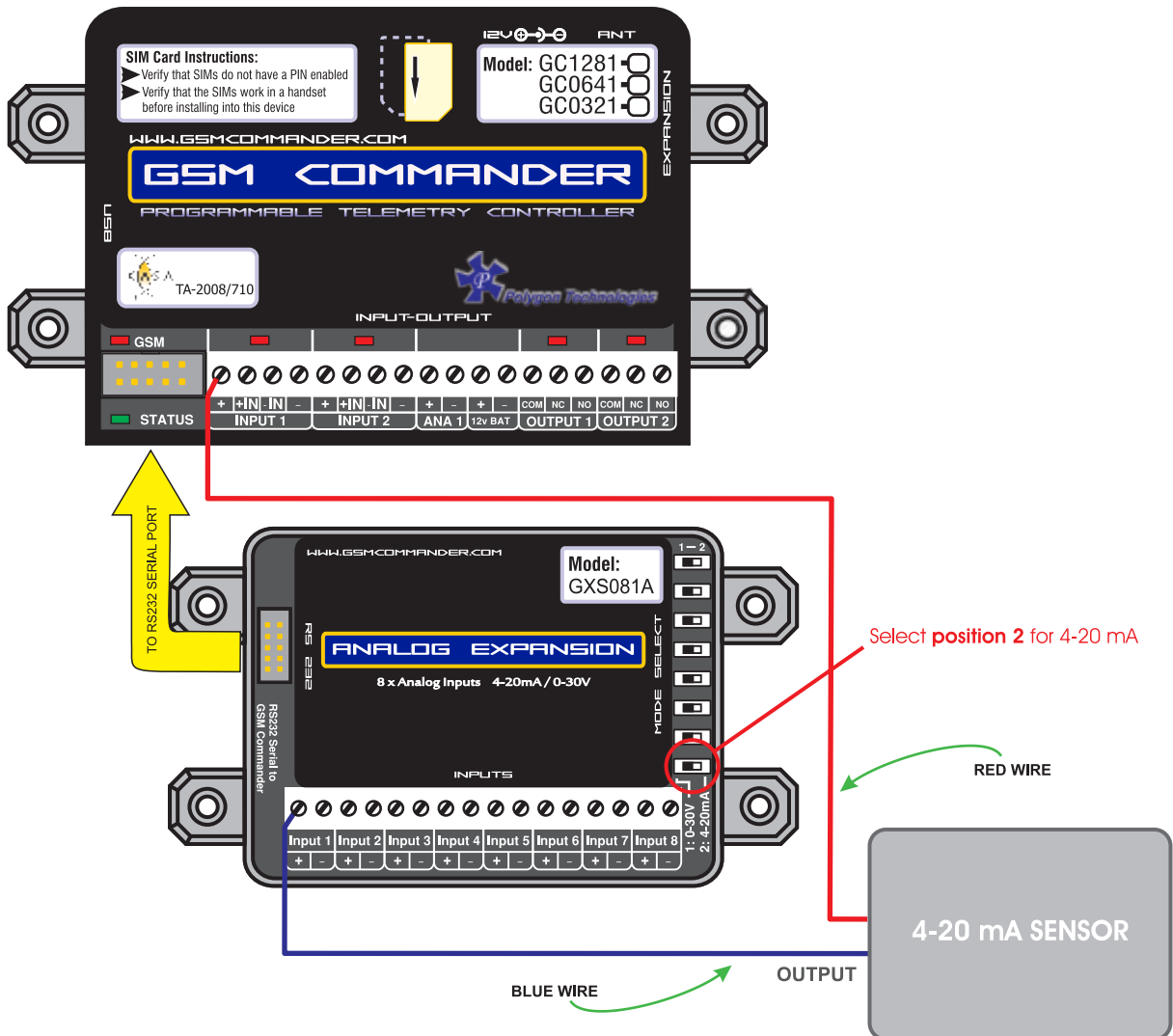
TECHNICAL DATA

Measuring Range:	PG1300-5 (0-5m H2O) / PG1300-10 (0-10m H2O)
Accuracy:	0.5%
Output Signal:	4-20mA (2 Wire)
Allowed Overpressure:	< 1.5 times full scale
Temperature Drift:	0.03% FS/°C
Power Supply Loop voltage:	12V-36V DC
Operating Temperature:	-20°C - +75°C
Storage Temperature:	-30°C - +80°C
Measuring Media:	Water, and other liquids that are compatible with 1Cr18Ni9Ti and 316L Stainless Steel. DEFINITELY NOT for use in measurement of highly flammable liquids like gasoline!

USING THE ONBOARD ANALOG PORT



USING THE ANALOG EXPANSION



PLEASE NOTE: THIS IS A GUIDELINE ONLY. WE CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR LOSSES IN ANY WAY.