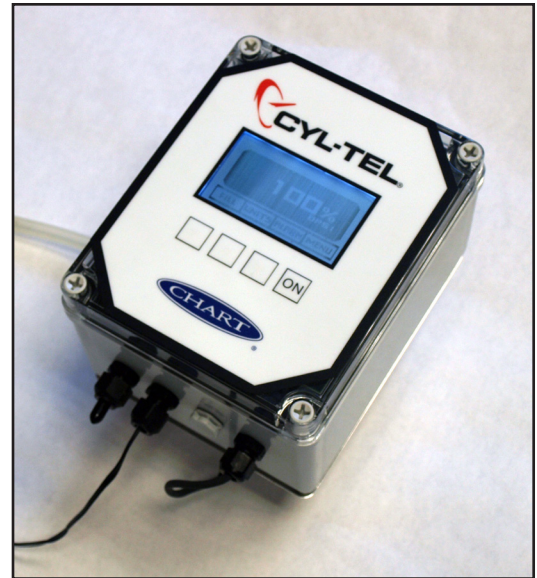


CYL-TEL®

DIGITAL ELECTRONIC LIQUID LEVEL GAUGE

The Cyl-Tel® Gen 5 is a digital electronic liquid level gauge designed specifically for the Perma-Cyl® MicroBulk Storage System. The Cyl-Tel gauge has been updated to Gen 5 to include the latest in electronic and differential pressure measurement technologies. The new design includes: accurate liquid level reading using differential pressure, a graphical display, and a simplified logic with nine selectable units of measure that eliminates the need for lookup charts. The Cyl-Tel is telemetry-ready with built in outputs which eliminate the need for additional boards and is completely compatible to most current telemetry system requirements.



Cyl-Tel is standard on 450L and larger Perma-Cyl tanks

FEATURE COMPARISON

	CYL-TEL	DP GAUGES
500 psi pressure rating	✓	✓
Oxygen cleaned	✓	✓
Digital level readout	✓	
Digital pressure readout (option)	✓	
No calibration charts required	✓	
One gauge for all Perma-Cyl tanks	✓	
One gauge for – LOX / LIN / LAR / N ₂ O / CO ₂	✓	
(8) level readouts options	✓	
(3) pressure readout options	✓	
(3) adjustable level alerts	✓	
(3) adjustable pressure alerts	✓	
User programmable	✓	
Telemetry ready (no plumbing changes)	✓	
Digital & 4-20 mA output signals	✓	
NEMA 4 water and weather tight	✓	
Equalization valve option	✓	
Integrates with other alarm systems	✓	

See specifications (back page) for full details on Cyl-Tel features.

CYL-TEL HIGHLIGHTS

- Improves customer readability by eliminating calibration charts
- Programmable to tank model or by tank geometry
- Telemetry-ready outputs compatible with many systems, including cellular
- Standard pulse and 4-20mA outputs; as well as 3 alarm outputs for level or pressure
- Power: Battery (2 x 1.5V Long Life Lithium) powered or optional 12Vdc adapter (for continuous power)
- Improved readability with a graphical display
- Built-in additional analog input port (0-5V) for optional pressure sensor connection



CYL-TEL[®]

DIGITAL ELECTRONIC LIQUID LEVEL GAUGE

Cyl-Tel Gauge Specifications

Physical

- Approximately 5.50" w x 6.69" h x 5.75" d
- Mounting compatible with all current and legacy mounting brackets on Chart/MVE tanks
- NEMA 4 enclosure (outdoor rated, water resistant)

Power Inputs

- 2 x AA Li-Batteries included
- Optional 12Vdc adapter

Outputs

- 4-20mA outputs for pressure and level
- Legacy pulse output for remote display and telemetry hardware
- 3 Alarm outputs

Inputs

- 0-5Vdc input for standard DP sensor
- 0-5Vdc input for optional pressure sensor

Operating Temperature

-30°C to +70°C

Display Resolution

% Full = 5%	Gal = 1 gal
L = 1 L	Lbs = 1 lb
Kg = 1 kg	SCF = 10
NM = 1	

Programmable Features

- Product Type: LN₂, N₂O, LAr, O₂, CO₂

Unit of Measure

Gallons (Gal)
Liters (L)
Pounds (Lbs)
Kilograms (Kg)
Standard Cubic Feet (SCF)
Normal Cubic Meters (NM³)
Inches H₂O (no light indicator)
Percent Full (% Full)

Alerts

- 3 Alerts programmable high or low level in 5% increments (0-100% full)
- Alerts can be set for pressure if optional pressure sensor is installed

(Optional) Interface Board

- Provides both 0-5Vdc and 4-20mA output for 0-100% level
- Cellular telemetry modem compatible with Chart's OnSite TelemetrySM System and remote monitoring

Differential Pressure Sensor

Units	Range (1)	Max Differential (2)	Supply Voltage (3)	Accuracy (4)	Warm Up Time (5)	Operating Temp Range (2)	Offset Stability (6)
Imperial	0-201 inH ₂ O	29 psi	5 VDC	±2.5 % FS	20 ms	-40 - 257 °F	±0.5 % FS
Metric	0-510 cmH ₂ O	200 kPa	5 VDC	±2.5 % FS	20 ms	-40 - 125 °C	±0.5 % FS

Notes:

- 1) Exact range is 0-50 kPa or 0-7.25 psi
- 2) Exposure beyond these specified limits will cause permanent damage to the sensor. Make sure to use isolation valve assembly to protect sensor during maintenance.
- 3) Sensor output is ratio metric within ±0.25 VDC of published supply voltage.
- 4) Accuracy encompasses all the uncertainty from linearity, temperature hysteresis, pressure hysteresis, and variation from nominal values.
- 5) Time required for sensor output to stabilize.
- 6) Offset Stability is the sensor's output deviation when subjected to 1000 hours of Pulsed Pressure, Temperature Cycling with Bias Test.
- 7) ¼" FPT pipe connections

Patent Number 6,542,848



Your Local Representative



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