

*Pioneer Petrotech Services Inc.*

Proudly Canadian  ISO 9001:2008 Certified



# PCPLink HP/HT Progressive Cavity Pump Monitoring & Control System

[www.pioneerps.com](http://www.pioneerps.com)

# PCPLink

Improve PCP run life and production performance with PPS's customizable monitoring systems

The PCPLink HPHT (high pressure high temperature) gauge provides real time downhole pressure measurements and the full vibration spectrum of three axes creating a snapshot of whether machinery is operating within optimum parameters. The SmartWatcher Touch surface unit was specifically designed to provide a convenient interface for viewing real time numeric data or graphical representations of the data.

✿ *Dual pressure monitoring provides information on PCP operating conditions*

By using vibration as a leading indicator of equipment health, operators can recognize issues and plan preventative maintenance thereby protecting and increasing pump

longevity. As well pressure data can prompt operators to vary the pump speed, maximizing pump efficiency and production, all while maintaining bottom-hole pressure.

✿ *Diagnose and plan PCP maintenance to prevent system failure and reduce pump down time.*

Having the ability to control the pump is essential to maintaining optimum pump lifting efficiency. Using PCPLink operators can monitor pressure, and temperature. Using these values, alarms can be setup for monitoring and control of the pump.

✿ *Increase pump lifting efficiency while controlling the pump operating time*

Touch System (ST)



# PCP Gauge Specifications



## Pressure

Pressure Sensor	Dual SOI technology
Pressure Range—psi	10K or 15K upon request
Accuracy—full scale	± 0.03% FS
Resolution—full scale	0.015% FS

## Temperature

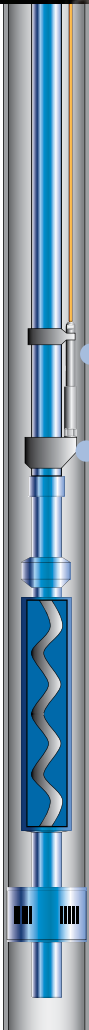
Temperature Range—°C	20 to 150   20 to 180
Accuracy—°C	± 0.5
Resolution—°C @ 1sec gate time	0.01

## Vibration

Vibration Sensor	MEMS Accelerometer
Measurement Range	± 50g
Resolution	7.5 ug

## Other Characteristics

Shock Resistance	400 impacts (2 ms half sine, any axis [x, y, z] up to 20,000g based on the sensing element)
Vibration Resistance	Random profile from 20 - 2,500Hz and up to 10g on any axis [x, y, z]
Thermal Shock Resistance	-40°C - 30°C in less than 2.5 min, minimum of 3 cycles
Service	H <sub>2</sub> S/CO <sub>2</sub> Services upon request
Maximum OD—inches	1.0
Data Set	Time / Pressure 1 & 2 / Temperature / Vibration
Housing Material	Inconel 718



PCPLink Dual Pressure Gauge

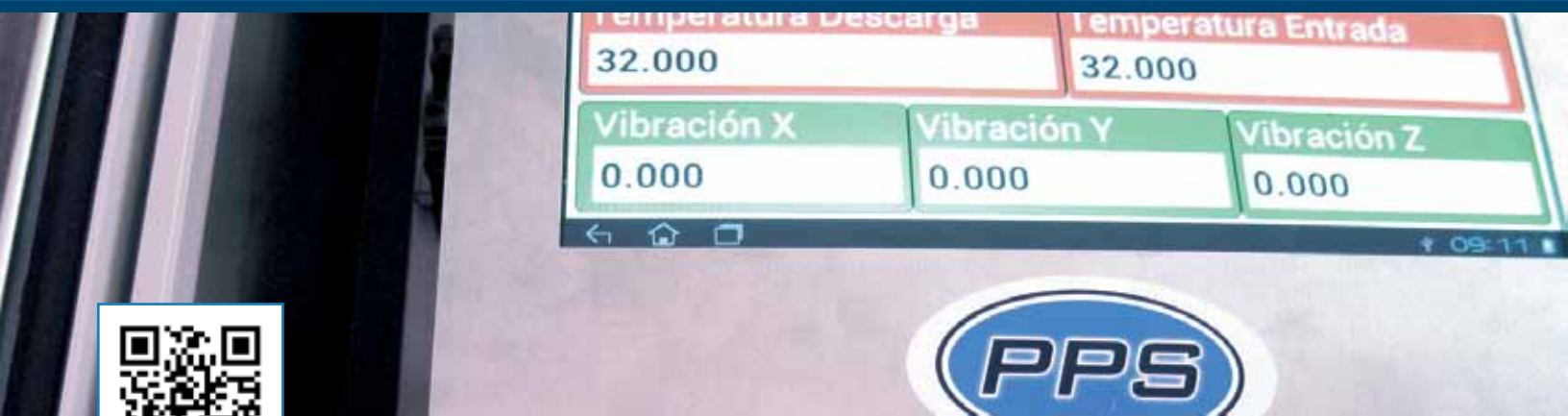


## PCPLink Benefits

- Monitor pump vibration
- Monitor pressure and temperature
- Control pump speed and efficiency



# Smart Gauges and Simple Software



## *Pioneer Petrotech Services Inc.*

#1, 1431-40 Avenue NE  
Calgary, Alberta, Canada, T2E 8N6  
Tel: 1-403-282-7669  
Fax: 1-403-282-0509  
Toll Free in Canada & US: 1-888-PP-GAUGE (774-2843)  
Email: [sales@pioneerps.com](mailto:sales@pioneerps.com)

