

2024



*TRUSTY PARTNER  
FOR ALL YOUR  
DOWNHOLE GAUGES*

# PRODUCT CATALOG



Neotek Pressure Corp.  
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# Introduction



Neotek Pressure Corp. (Neotek) develops and manufactures a wide range of oilfield instruments, including electronic downhole memory gauges, surface readout gauges, permanent installation systems, and geothermal logging tools.

Neotek products are designed and manufactured in Calgary, Canada with the most recent state of art technologies. Our products are produced with multiple testing procedures and automatic calibration systems to assure our customers obtain accurate data.

With team efforts, our goal is to provide the most robust downhole electronic pressure products with extremely high temperature, long term reliability and accuracy, and superior services to worldwide customers.



# Product List

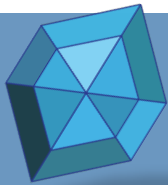


## Quartz

NeoQuartz Memory Gauge

NeoQ200C Quartz Memory Gauge

NeoMSRO Memory-SRO Combo Gauge



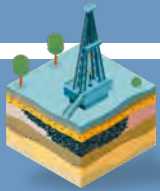
## Sapphire

NeoSapphire Memory Gauge

NeoSapphireXM Extreme Memory Gauge

NeoSPM Side Pocket Mandrel Gauge

NeoRTD External RTD Pressure Gauge



## Surface Readout

NeoSRO Surface Read-Out Gauge

NeoMSRO Memory-SRO Combo Gauge

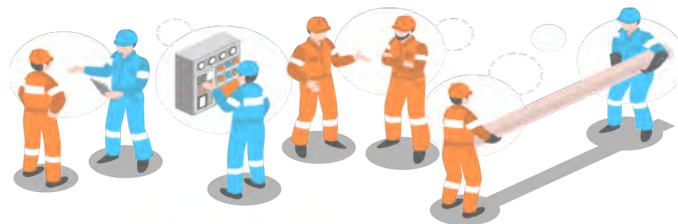
NeoPerm Permanent Monitoring System

## Geothermal

NeoThermal Geothermal Logging Tool

NeoDepth Well Depth System

NeoCarrier Gauge Carrier



# NeoQuartz



The NeoQuartz memory gauges are developed for the critical well testing and are designed to be run by wireline/service personnel with limited computer knowledge or experience in operating memory gauges.

There is no need to re-program the gauges after every run if customers run the same sample rate. The simple MaxView software allows operators to download data from the gauge and generate a report in pdf or ASCII file very quickly. This model is designed with very low power consumption and fast downloading data by USB interface.

## Applications

- Pressure Gradients
- Pressure Build-up Tests
- Drill Stem Tests
- Production Tests
- Injection Pressure Monitoring
- Frac Monitoring
- Coil Tubing Operation

## Specification

Sensor Type	Quartz
Pressure > Ranges	Up to - 30,000 psi
> Accuracy	±0.02% (full scale), ±0.015% (full scale) Typically
> Resolution	0.00006% F.S.
> Drift	< 0.02% psi/ year, F.S.
Temperature > Rating	150°C (302°F), 177°C (351°F)
> Accuracy	±0.2°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	2AA, CC or 2CC lithium packs
Memory Capacity	4M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	1 second to 18 hours per sample
Outside Diameter	0.75"(19.1 mm)/1.27"(32.3mm)
Overall Length	23" (584 mm) with 1CC pack
Housing Material	Inconel 718/MP35N
Sealing	Metal to Metal and Elastomer



# NeoQ200C



The NeoQ200C Quartz Memory Gauges are developed for extremely high downhole pressure and temperature with sour conditions. The latest innovative hybrid technologies are utilized to greatly extend gauge life into multiple years without replacing the electronic board.

This gauge has six pins with locking connector to provide dual power channels and prevent the battery from disconnection during possible downhole vibration or shocking circumstances. The same simple to use MaxView software is used for programming gauge, downloading data, and processing reports.

## Applications

- Extreme High Temperature Reservoir
- Pressure Gradients
- Pressure Build-up Tests
- Drill Stem Tests
- Production Tests
- Well Interference Tests
- Frac Monitoring

## Specification

Sensor Type	Quartz
Pressure > Ranges	Up to - 35,000 psi
> Accuracy	±0.02% (full scale), ±0.015% (full scale) Typically
> Resolution	0.00006% F.S.
> Drift	< 0.02% psi/ year, F.S.
Temperature > Rating	200°C (392°F) or 210°C (410°F)
> Accuracy	±0.2°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	1 or 2CC lithium packs
Memory Capacity	4M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	0.1 second to 18 hours per sample
Outside Diameter	1.27"(32.3mm), or 1.375"(34.9mm)
Overall Length	23" (584 mm) with 1CC pack
Housing Material	Inconel 718 or MP35N
Sealing	Metal to Metal and Elastomer



# NeoSapphire



The NeoSapphire electronic downhole gauges are designed with low costs and easy to use as the main criteria. It can be used as memory gauge or surface readout (SRO) gauge. The gauge also writes data into gauge memory at SRO mode to have data backup and integrity. It can be run by field personnel with limited computer and electronic product knowledge.

The typical applications of this model include slickline gradient and pressure build-up jobs. With a unique low power consumption design, a single C battery can run over a year at regular operations. MaxView and MaxSRO software allows operators to conduct programming, downloading, and reporting very easily.

## Applications

- Pressure Gradients
- Pressure Build-up Tests
- Drill Stem Tests
- Production Tests
- Injection Pressure Monitoring
- Coil Tubing Operation

## Specification

Sensor Type	Silicon-Sapphire
Pressure > Ranges	Up to - 25,000 PSI
> Accuracy	±0.03% (full scale)
> Resolution	0.0003%
> Drift	<3 psi / year
Temperature > Rating	125°C(257°F) / 150°C(302°F) / 177°C(351°F)
> Accuracy	±0.5°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	One AA or C lithium pack, 14 VDC for SRO
Memory Capacity	4M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	0.1 second to 18 hours per sample
Outside Diameter	0.75"(19.1mm) / 1.0"(25.4mm) / 1.25"(31.8mm)
Overall Length	9" (229mm), 11"(279mm)
Housing Material	Inconel 718 / Stainless Steel 17-4
Service	H <sub>2</sub> S



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# NeoSapphireXM



The NeoSapphireXM is designed for critical well conditions by welding the sensor onto the housing, so there is no potential leaking pass between sensor and housing. Both metal to metal and elastomer seals are used to secure the sealing between battery housing and electronics.

Six pins with locking mechanism connector is used to provide dual power channels and prevent the battery from disconnection during staying downhole.

Neotek innovative design allows this model to work at 177 °C for the long term. Thus, most customers choose this model for high temperature and pressure with vibration/shocking and/or sour conditions, but still at a lot lower costs than quartz gauges.

## Applications

- H<sub>2</sub>S or other Corrosive Conditions.
- Pressure Gradients
- Pressure Build-up Tests
- Drill Stem Tests
- Injection Pressure Monitoring
- Coil Tubing Operation

## Specification

Sensor Type	Silicon-Sapphire
Pressure > Ranges	Up to - 20,000 PSI
> Accuracy	±0.03% (full scale)
> Resolution	0.0003%
> Drift	<3 psi / year
Temperature > Rating	150°C(302°F) / 177°C(351°F)
> Accuracy	±0.5°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	One C or CC lithium pack
Memory Capacity	4M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	0.1 second to 18 hours per sample
Outside Diameter	1.27"(32.3mm) / 1.5"(38.1mm)
Overall Length	11"(279mm)
Housing Material	Inconel 718
Sealing	Metal to Metal and Elastomer



# NeoSRO Combo



The NeoMSRO Memory-SRO Combo Gauge offers either memory or SRO working mode for customers who want to have the flexibility in gauge types. The gauge can be used as a standard memory gauge or an SRO gauge with an adapter installed on the gauge to connect to a cable head.

MaxView software is used for memory gauge applications and MaxSRO software is used for SRO operations.

## Applications

- Real Time Downhole Data
- Post Stimulation Evaluation
- Pressure Build-up Tests
- Drill Stem Test
- Injection Pressure Monitoring
- Coil Tubing Operation

Specification		
Sensor Type	Silicon-Sapphire	Quartz
Pressure Accuracy	±0.03% (full scale)	±0.015% (full scale)
Temperature Accuracy	±0.5°C	± 0.15°C
Overall Length	11" (279 mm)	23"(584 mm)
Pressure > Ranges	Up to - 30,000 psi	
> Accuracy	0.0003%	
> Drift	< 3 psi / year	
Temperature > Rating	150°C(302°F) / 177°C(351°F) / 200°C(392°F)	
> Resolution	0.01°C	
Power Source	24 V DC	
Communication	USB/RS232	
Data Set Contents	Time / pressure / temperature	
Display Mode	liquid crystal	
Work mode	SRO	
Sample rate	1 second to any longer period	
Outside Diameter	0.75" (19.1 mm) / 1.0" (25.4 mm) / 1.25" (31.8 mm)	
Housing Material	Inconel 718 / Stainless Steel 17-4	



# NeoPerm



## A Typical System

- Downhole Pressure Gauge
- Gauge Carrier
- Electric Cable
- Cable Protectors
- Cable Head Adapter and Seal Accessories
- Surface Data Acquisition System

## Applications

- Long Term Reservoir Monitoring
- Offshore Data Monitoring
- Critical Well Monitoring
- Remote Well Monitoring
- Muti-Zone Well Monitoring

The NeoPerm permanent gauge system is designed to monitor downhole reservoir pressure and temperature in production optimization and management of oil and gas assets. Customers can choose either single gauge single channel or multi-gauge multi-channel configurations. The real-time downhole data can be stored in a surface box at well sites or/and can be transmitted to remote locations.

In order to accommodate different applications and budgets, system components such as gauge transducers, cable types, and gauge carriers should be designed case by case in order to optimize energy resources and economical outcomes.

Specification		
Sensor Type	Silicon-Sapphire	Quartz
Pressure Accuracy	±0.03% (full scale)	±0.015% (full scale)
Temperature Accuracy	±0.5°C	± 0.15°C
Overall Length	8" (203 mm)	15"(381 mm)
Pressure Ranges	Up to - 25000 psi	
Pressure Resolution	0.0003%	
Pressure Drift	< 3 psi / year	
Temperature Rating	125°C / 150°C / 177°C/200°C	
Temperature Resolution	0.01°C	
Power Source	24 V DC	
Communication	USB/RS232	
Data Set Contents	Time / pressure / temperature	
Display Mode	liquid crystal	
Outside Diameter	1.0" (25.4 mm) / 1.25" (31.8 mm)	
Work mode	SRO	
Service	H <sub>2</sub> S service	
Housing Material	Inconel 718 / Stainless Steel 17-4	
Sample rate	1 second to any longer period	



# NeoSPM



The NeoSPM Side Pocket Mandrel Gauge utilizes our robust electronic design with S.O.I. technology to measure pressure and temperature by working as a gas lift valve. The gauge housings are designed according to conventional 1" and 1.5" gas lift valves, therefore, they can be set and retrieved by using standard slickline side pocket mandrel tools.

This model also uses the very simple but powerful Neotek MaxView software for programming, downloading, and report-

## Applications

- Gas Lift Monitoring
- Stimulation Monitoring
- Long Term Flowing Monitoring
- Post Stimulation Evaluation
- Interference Tests
- Frac Monitoring

Specification	
Sensor Type	S. O. I.
Pressure > Ranges	Up to - 15,000 PSI
> Accuracy	±0.03% (full scale)
> Resolution	0.0003%
> Drift	<3 psi / year
Temperature > Rating	150°C(302°F) / 177°C(351°F)
> Accuracy	±0.5°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	One AA lithium battery pack
Memory Capacity	4M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	1 second to 18 hours per sample
Outside Diameter	1.0"(24.5mm), 1.5"(38.1mm)
Overall Length	12.31" (312.7mm), 19.50" (495.3mm)
Housing Material	Inconel 718 / Stainless Steel 17-4



# NeoRTD



**Note: Highlight RTD for fast**



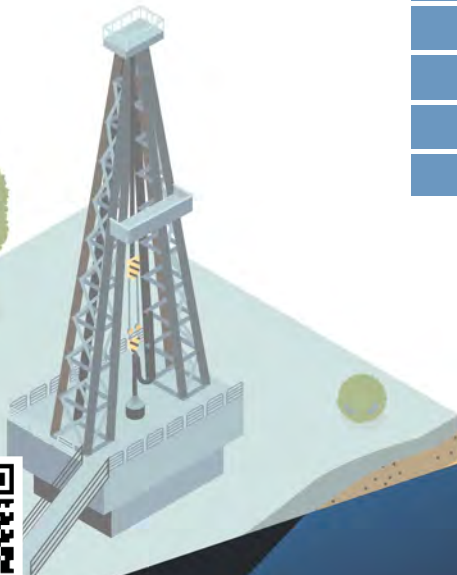
The NeoRTD External RTD Memory Gauge combines sapphire technology with RTD sensor to allow users obtain fast temperature responses. This product is primarily designed for detecting tubing and casing leakage problem. It could also be used for other operations such as gradients and build up tests.

The same simple to use Neotek MaxView software is used for programming gauges and conducting data processing. All files are in ASCII data format.

## Applications

- **Tubing and/or Casing Leakage Detections**
- **Gradient Tests**
- **Water Injection Tests**
- **Coil Tubing Operations**

Specification	
Sensor Type	Silicon-Sapphire/RTD
Pressure > Ranges	Up to - 20,000 PSI
> Accuracy	±0.03% (full scale)
> Resolution	0.0003%
> Drift	<3 psi / year
Temperature > Rating	150°C(302°F) / 177°C(351°F)
> Accuracy	±0.3°C
> Resolution	0.01°C
Communications	USB/RS232
Power Source	Dual AA or C lithium battery pack
Memory Capacity	2 M data sets
Data Set Contents	Time / pressure / temperature
Outside Diameter	0.75"(19.1 mm) / 1.25"(31.8 mm)
Overall Length	16" (406 mm)
Housing Material	Inconel 718 / Stainless Steel 17-4



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# NeoDepth



The NeoDepth Well Depth system is a portable device that runs on batteries or external power and has a LCD display where an operator could see the actual depth, speed, and tension during a slickline job.

It is also equipped with 3 additional 4-20mA channels for measuring other wellhead parameters.

This device uses a NEMA 4 type of enclosure constructed for either indoor or outdoor use to provide protection to personnel against incidental contact with the device and to the device against falling dirt, rain, snow, etc.

The system can be set up using a very simple menu or by connecting to a PC. It can be operated on a stand alone mode (Memory) or on a real time mode (SRO) with the use of a PC to display depth, speed, tension and two additional channels.

## Applications

- ◆ **Slickline depth measurement**
- ◆ **Slickline tension measurement**
- ◆ **Wireline depth measurement**

## Specifications

Display	LCD graphic display (320 x 240)
Memory	48 MBytes
Power	Input voltage: 6 - 28 VDC, 200 mA at 12VDC. 2 or 4 D size lithium battery cells.
Sampling Rate	From 0.1 second to 1.8 hours
Encoder	+5 V optical encoder (512 pluses per rev. or better)
External Channels	3 x 4 - 20mA
Depth Alarm	Up to 8 with a close to surface alarm
Speed Alarm	One
Tension Alarm	One
Dimensions	4.30" (H) x 7.90" (W) x 9.10" (L)
Weight	8 lbs
Operating Temperature	-20°C to +70 °C
Communication	USB2.0 (type -B port) Data transfer rates up to 1.8 MBits/second
Depth Accuracy	±0.3 ft (0.1 m)
Enclosure Type	NEMA 4





NeoCarrier gauge carriers are machined from one solid metal bar to hold one to four gauges. The carriers are mainly designed for measuring internal and/or external pressures for drill stem tests. Up to three internal gauges can be utilized for DST or other pressure survey applications.

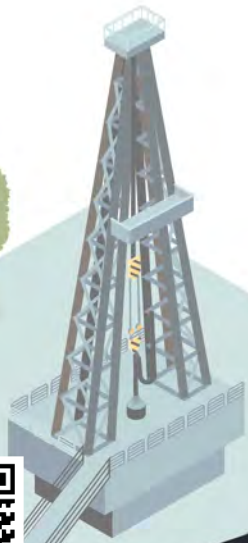
The gauge carriers are flexible for holding either Neotek gauges or other brand gauges that customers may have. Metal to metal seal between gauge and carrier is to ensure best downhole gauge operations.

## Applications

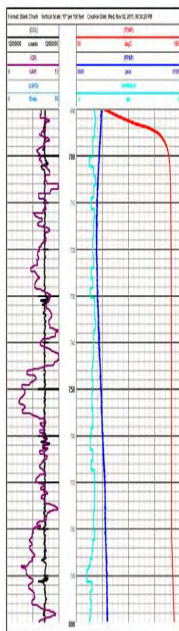
- Drill Stem Testing
- Stimulation Monitoring
- Well Testing
- Injection Monitoring
- Reservoir Monitoring
- Perforation Monitoring

## Specification

Outside Diameter	5" (127mm)
Inside Diameter	2.25" (57 mm)
Length	76" (1930 mm)
Pressure Rating	Burst: 22,000 psi (150 MPa) Collapse: 21,000 pis (145 MPa)
Tensile Strength	470,000 lbs (220,000 kgf)
Material	AISI 4140
Thread Type	3 1/2" IF Box x 3 1/2" IF Pin
Weight	237 lbs (108 kg)



# NeoThermal



The NeoThermal logging tool is designed for ultra high temperature down-hole conditions. Our robust surface readout and memory electronics combined with vacuum flask technology allow this product to perform at 350 deg.C (662 deg.F) for up to 4 hours and at 300 deg.C (572 deg.F) for up to 8 hours.

Combining downhole spinner, casing collar locator (CCL), pressure, temperature, and gamma data with our surface depth time recorder NeoDepth system, customers are capable of running a single phase profile log at extreme high temperatures. This tool may be ordered in different configurations such as PT only (pressure and temperature), PTS (pressure, temperature and spinner), or complete parameters (pressure, temperature, spinner, CCL, and Gamma). Tool working mode can be memory only for slickline operation or SRO/Memory for wireline operations. We provide free of charge MaxLog software for operating tool and data processing.

## Applications

- Geothermal Well Tests
- Steam Injection Monitoring
- Ultra High Oil Well Tests
- Wellbore Integrity Tests
- Tubing or Casing Leakage Detection

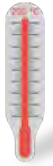


## Specification

Sensor Type	Sapphire/Quartz/RTD/Spinner/Gamma Crystal
Pressure > Ranges	10,000 or 18,000 PSI
> Accuracy	±0.03% (full scale)
> Resolution	0.0003%
> Drift	<3 psi / year
Temperature > Rating	350°C (662°F)
> Accuracy	±0.3°C
> Resolution	0.01°C
Spinner Range	5 - 7000 RPM
Spinner Accuracy	±0.5 Revolution
Spinner Resolution	0.08 RPS
Communications	USB/RS232
Power Source	C size lithium for memory / 60V DC for SRO
Memory Capacity	2M data sets
Data Set Contents	Time / pressure / temperature
Sample Rate	0.1 second to 1.8 hours per sample
Outside Diameter	1.75" ( 44.45 mm)
Overall Length	67" (1702 mm) & 82.5"(2096mm)
Housing Material	Inconel 718 / Stainless Steel 17-4

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# Why Neotek



## Extremely high temperature Capabilities

With Neotek advanced electronic technologies, we are capable of offering pressure gauges working at 200°C for the long term to deal with very deep or abnormal temperature reservoirs. We could also offer up to 350°C tools with flask technology for geothermal wells or steam injections.



## User-friendly Software

The gauge system is completed with simple to use free of charge software. Our software interface is very user friendly and a report can be generated within 30 minutes. Data reports can be in different formats for printing or email purpose.



## Low Power Consumption and Long Battery Life

Neotek products work continuously over a long period of the time benefited from low power consumption designs. In general, Neotek products consume about 30% less power than other products available in the market.



## Fast Data Downloading

Data downloading from gauge to computer is much faster than the gauges in the market. The optimized data structure and utilization of new technologies enable Neotek products to be accessed quickly to save customers time.



## Ease of Operation

All Neotek series of products are designed to be compact and lightweight for convenient handling and space limited applications. All gauges are made to be run by wireline/service personnel with limited computer knowledge or experience in running downhole gauges.



## Field Proven Long Term Reliability

Neotek Products have been used by worldwide customers and have been recognized as the most reliable pressure and temperature gauges in all different types of downhole conditions.



## Prompt Support and Competitive Prices

Neotek team aims to provide very prompt responses to customer's requests on either technical support or business assistance with best values.

