

Model 2100 Nold DeAerator™

De-aired water or antifreeze solutions are an essential ingredient of any hydraulic piezometer or settlement system where the formation of air bubbles in the fluid-filled tubing must be prevented. The Nold DeAerator removes dissolved gases from fluids at a much faster rate than conventional heating/boiling methods. The holding tank of the Model 2100 can be evacuated using either a vacuum pump or a water-powered aspirator. Water (or antifreeze solution) is drawn into the tank and agitated violently by a rotating impeller, causing cavitation, nucleation and rapid expulsion of dissolved gases. The Nold DeAerator can also be used with other fluids to remove dissolved gases.

Specifications	
Standard Capacity	8 liter
Power Supply	115 V (60 Hz) or 230 V (50/60 Hz)
Power Consumption	59 watts (115 V) or 64/59 watts (230 V)
Vacuum Requirements	750 mm Hg (12 Torr) or better
Degassing Purity	0.6 ppm
Dimensions (L \times W \times H)	190 × 190 × 600 mm



Model 3400 Semiconductor Piezometers/Pressure Transducers

The Model 3400 Semiconductor Piezometers and Pressure Transducers are intended for dynamic measurements of fluid and/or pore water pressures in standpipes, boreholes, embankments, pipelines, pressure vessels, reservoirs, etc. They are also used for static pressure movement where the readout system is incompatible with vibrating wire type transducers. Three transducer output options are available: mV/V, 0-5 VDC or 4-20 mA.

Specifications	
Ranges	100, 250, 400, 600 kPa; 1, 2.5, 6 MPa
Over Range	2 × rated pressure
Output	10 mV/v, 4-20 mA, 0-5 V
Accuracy	< 0.1% F.S. (dependent on readout)
Linearity	< 0.5% F.S.
Temperature Range	-20 °C to +80 °C
Dimensions (L \times ø)	194 × 32 mm



Model 3800 Thermistor Probes

The Model 3800 Thermistor Probe consists of an interchangeable thermistor bead mounted inside a rugged PVC (Model 3800-1) or stainless steel (Model 3800-2, 3800HT) housing. They are used for remote readings, such as measuring hydration and cooling temperatures in placement of mass concrete. The 3800HT is for temperatures of up to 230 °C.

Specifications	3800-1/2	3800HT
Range ¹	−20 °C to +80 °C	−30 °C to +230 °C
Resolution	0.1 °C	0.1 °C
Accuracy ²	±0.5 °C; ±0.2 °C	±0.5 °C
Dimensions $(L \times \emptyset)$	50 × 12 mm <i>(probe)</i>	75 × 19 mm <i>(probe)</i>

Other ranges available on request. | ²Accuracy of ±0.5 °C for Models 3800-1-1 and 3800-2-1; ±0.2 °C for Models 3800-1-2 and 3800-2-2.



Model 3810 Thermistor Strings

The Model 3810 Thermistor String comprises a number of individual 3800 sensors mounted in a rugged, multi-conductor cable for multiple temperature measurements in a single borehole. Thermistor strings are manufactured according to customer requirements for overall length, number of sensors and accuracy.

Specifications	3810-1	3810-2
Range ¹	−20 °C to +80 °C	−20 °C to +80 °C
Resolution	0.1 °C	0.1 °C
Accuracy ²	±0.5 °C	±0.2 °C
Dimensions (L \times ø)	45 × 16 mm (sensor)	64 × 22 mm (sensor)

¹Other ranges available on request. | ²Stated accuracy is for the thermistor sensor only, between 0 °C and 70 °C. The cable used to connect the thermistor to the readout adds resistance and measurement error.



Model 3810A Addressable Thermistor Strings

The Model 3810A Addressable Thermistor String is a variation of the Model 3810 Thermistor String, which uses addressable thermistor sensors installed on a 2-pair cable. This configuration allows up to 248* sensors to be installed on a single, 6 mm diameter cable up to 2000 m in length. (*The number of sensors that can be supported depends on the overall length of the cable. Please contact GEOKON for details.)

Specifications	
Range	−20 °C to +80 °C
Resolution (Non-Linear)	0.002 °C /0° to +50 °C); 0.005 °C (-20° to +80 °C)
Accuracy	$ \begin{array}{l} \pm 0.35 \ ^{\circ} C \ @ \ -20^{\circ} \ to \ -10 \ ^{\circ} C; \ \pm 0.15 \ ^{\circ} C \ @ \ -10^{\circ} \ to \ 0 \ ^{\circ} C; \\ \pm 0.07 \ ^{\circ} C \ @ \ 0^{\circ} \ to \ +50 \ ^{\circ} C; \ \pm 0.12 \ ^{\circ} C \ @ \ +50^{\circ} \ to \ +65 \ ^{\circ} C; \\ \pm 0.16 \ ^{\circ} C \ @ \ +65^{\circ} \ to \ +80 \ ^{\circ} C \end{array} $
Dimensions (L × g)	140 × 22 mm (sensor)



Model 4700 VW Temperature Gauge

The Model 4700 VW Temperature Gauge consists of a stainless steel transducer body to which a vibrating wire element is attached. As the thermal coefficients of expansion of the body and wire are different, a simple, yet sensitive, temperature measuring device can be constructed. These gauges are ideally suited for use in projects that require datalogging and where other types of VW transducers are in use.

Specifications	
Range	100 °C (−20 °C to +80 °C)
Optional Range	200 °C (-200 °C to 0 °C or 0 °C to +200 °C)
Resolution	0.034 °C
Accuracy ¹	±0.5% F.S.
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Cables

GEOKON cables are waterproof, have good electrical properties and can be buried in soil or embedded in concrete. Cable construction consists of one or more shielded pairs with individual drain wires for electrical noise protection. Cable jackets include PVC for standard applications, Teflon® for use at high temperatures and Polyurethane, for use where extra abrasion resistance is required. Armored cables, for use in earth dams, and cables with straining wires and integral vent tubes are also available.

Specifications	
Conductors	4, 6, 8, 10, 12 and 24
Conductor Insulation	High Density Polypropylene, 8 and 10 mil; Fluorinated Ethylene Propylene, 10 mil
Shielding	Aluminum polyester with drain wire, 24 AWG tinned copper
Jackets ¹	Extruded PVC standard, Teflon , Polyurethane, Polyethylene and Armored Polyethylene
Temperature Range	-20 °C to +80 °C; -80 °C to +200 °C (<i>Teflon®</i>)
for an analysis	

Other cable jackets are available for special applications.

¹Transducer accuracy established under laboratory conditions.