Global Leading Manufacturer of Geophones

Geophones & Hydrophones



DTCC
DYNAMIC TECHNOLOGIES



www.dtcc.biz

About us

The DTCC Group was formed in 1999, with its headquarters located in Calgary, Canada. It is a manufacturer of vibration sensing and measuring equipment. This equipment, which uses “Internet of Things” technology, is designed for use in unusual and challenging environments. The DTCC Group has an international presence: in addition to the corporate, training and marketing facilities in North America, we have a Business Development Center located in Beijing, together with a Research, Development and Manufacturing Facility in Shenzhen. Additional production locations are in Langfang, Hebei and Dongguan, Guangdong. DTCC also has offices and subsidiaries in several other countries round the world.

Our product ranges from Geophones, Geophone Strings available in Land, Marsh, 3C, Hydrophones, Dual Component for transition and marine seismic. Digital cables for Land, Marsh and Transition Zone for the most widely used recording systems. Leader wire and connectors of all types used in seismic acquisition.

Our capability to manufacture standard and custom-built cables and connectors are extraordinary. Our capacity allows us to build over 1 million geophone elements and 500,000 geophone strings per year. We have ability to manufacture over 1 million geophysical connectors per year from standard to complete custom geophysical connectors. We have ability to manufacture 9 million meters of digital seismic cables for land, transition and marine applications for the most widely used systems.

We boast a 60,000 sq./ft state of the art R&D center in Shenzhen, China that includes over 20 in house engineers, an in-house machine shop that allows us to rapidly produce both proto type and production tooling in order to respond quickly to customer demands. In house injection molding capability that allows us to test and perfect tooling before it is put into production.
All these features allow DTCC to be a leader in the manufacturing of seismic equipment used by geophysical contractors worldwide. Together with our experienced sales force we are able to provide our customers with highest quality and most cost-effective product in an expedient matter and this keeps DTCC customers coming back.

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GEOPHONES

DT-SOLO 10Hz Vertical (HP301V) 02
DT-SOLO 10Hz Horizontal (HP301H) 03
DT-SOLO 2Hz Vertical (HP302V) 04
DT-SOLO 2Hz Horizontal (HP302H) 05
DT-SOLO 5Hz Vertical (HP305V) 06
DT-SOLO 5Hz Horizontal (HP305H) 07
DT-SOLO OMNI 14Hz (HP314) 08
DT-SOLO OMNI 15Hz (HP315) 09
DT-SOLO 60Hz (HP360) 10
DT-SOLO 4.5Hz Vertical (HP304V) 11
DT-HP201-10Hz-350 Vertical 12
DT-HP202-10Hz-350 Vertical 13
DT-HP204-10Hz-292 Vertical 14
DT-HP206-4.5Hz Vertical 15
DT-HP206-4.5Hz Horizontal 16
DT-HP102-10Hz-395 Vertical 17
DT-HP103-10Hz-375 Vertical 18
DT-HP104-10Hz-375 Vertical 19
DT-20DX 20

HYDROPHONES

DT-44-14A 22
DT-25-11A / DT-25-14A 23
DT-HP321-01 24
DT-HP321-02 25

ACCESSORIES

String Configurations 26
Geophone Case Types 28
Connector Types 30
DTCC LEADER WIRES (DLW) 31

TESTER

SCG-900 Geophone Tester 33

DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 10Hz Vertical (HP301V)

(P/N:611600100)

Specifications

All parameters are specified at +25° C
in the vertical position unless otherwise stated.

Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±3.5%
Spurious Frequency	>260 Hz

Distortion

Distortion	< 0.1%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 20° Tilt	< 0.15% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.51
Damping with 20 kΩ load	0.7
Tolerance	±6%

Coil Resistance

Standard	1800 ohm
Tolerance	±5%

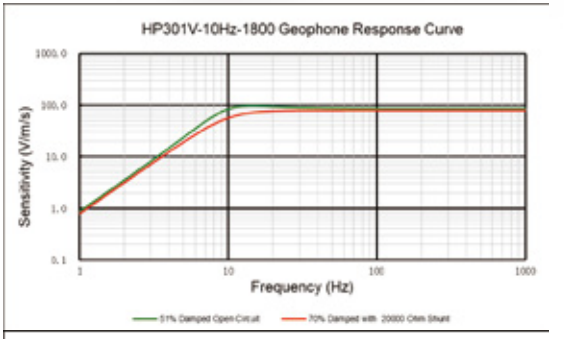
Sensitivity

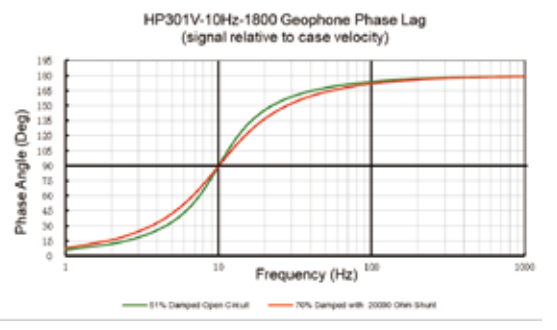
Open Circuit Intrinsic Voltage Sensitivity	85.8 V/m/s (2.18 V/in/s)
Sensitivity with 20 kΩ load	78.7 V/m/s (2.00 V/in/s)
Tolerance	±3.5%

Physical Characteristics

Moving Mass	14 g (0.49 oz)
Max. Coil Excursion p.p.	3.50 mm (0.138 in)
Diameter	30.2 mm (1.19 in)
Height	39.9 mm (1.57 in)
Weight	130 g (4.6 oz)
Operating Temperature Range	– 40°C - +90°C







Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 10Hz Horizontal (HP301H)

(P/N:611600200)

Specifications

All parameters are specified at +25° C
in the horizontal position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±3.5%
Spurious Frequency	>260 Hz

Distortion

Distortion	< 0.1%
Distortion at horizontal	0.05% Typical
Distortion from horizontal to 3° Tilt	< 0.15% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.51
Damping with 20 kΩ load	0.7
Tolerance	±6%

Coil Resistance

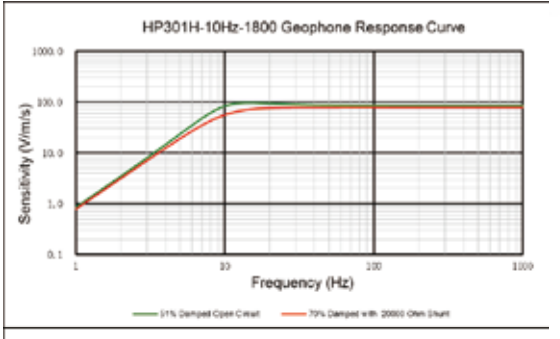
Standard	1800 ohm
Tolerance	±5%

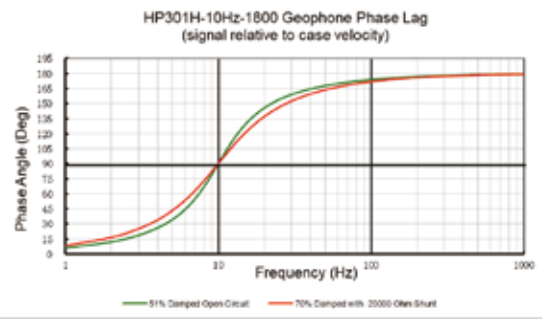
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	85.8 V/m/s (2.18 V/in/s)
Sensitivity with 20 kΩ load	78.7 V/m/s (2.00 V/in/s)
Tolerance	+ 5%, - 3.5%

Physical Characteristics

Moving Mass	14 g (0.49 oz)
Max. Coil Excursion p.p.	3.50 mm (0.138 in)
Diameter	30.2 mm (1.19 in)
Height	39.9mm(1.57in)
Weight	130 g (4.6 oz)
Operating Temperature Range	- 40°C - +90°C





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DT-SOLO 2Hz Vertical (HP302V)

Specifications
All parameters are specified at +20° C
in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	2 Hz
Tolerance	±15%

Distortion

Distortion	⩽ 0.30% (Measured at 12Hz with 0.7in/s p-p)

Damping

Open Circuit Damping	0.70
Tolerance	±15%

Coil Resistance

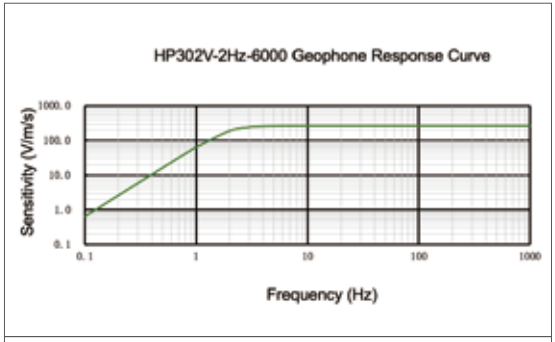
Standard	6000 ohm
Tolerance	±5%

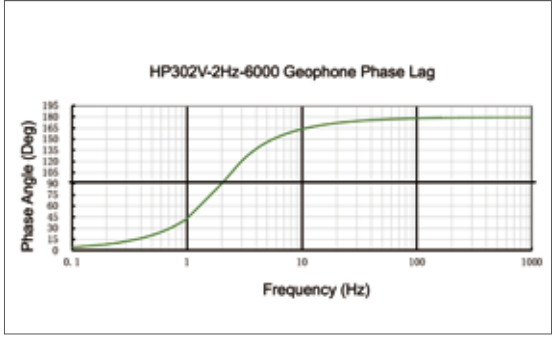
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	260 V/m/s (6.6V/in/s)
Tolerance	±10%

Physical Characteristics

Moving Mass	60 g (2.12 oz)
Max. Coil Excursion p.p.	3 mm (0.12 in)
Diameter	38.5 mm (1.52 in)
Height	47 mm (1.85 in)
Weight	260 g (9.17oz)
Warranty period	1 year





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 2Hz Horizontal (HP302H)

Specifications
All parameters are specified at +20° C
in the horizontal position unless otherwise stated.



Frequency

Natural Frequency (Fn)	2 Hz
Tolerance	±15%

Distortion

Distortion	⩽ 0.30% (Measured at 12Hz with 0.7in/s p-p)

Damping

Open Circuit Damping	0.70
Tolerance	±15%

Coil Resistance

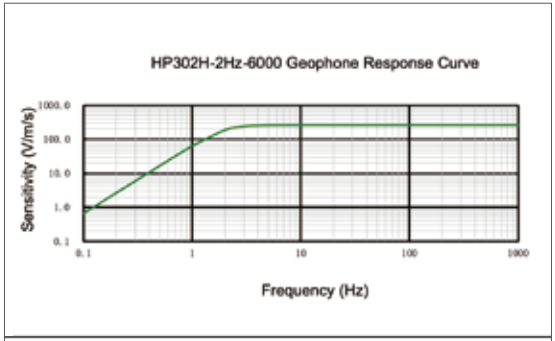
Standard	6000 ohm
Tolerance	±5%

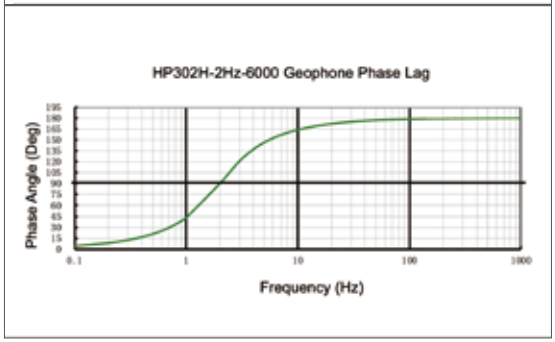
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	260 V/m/s (6.6V/in/s)
Tolerance	±10%

Physical Characteristics

Moving Mass	60 g (2.12 oz)
Max. Coil Excursion p.p.	3 mm (0.12 in)
Diameter	38.5 mm (1.52 in)
Height	47 mm (1.85 in)
Weight	260 g (9.17oz)
Warranty period	1 year





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DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 5Hz Vertical (HP305V)

(P/N:612200100)

Specifications

All parameters are specified at +22° C
in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	5Hz
Tolerance	±7.5%
Spurious Frequency	>150 Hz

Distortion

Distortion	< 0.1%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 10° Tilt	< 0.10% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.6
Damping with 43 kΩ load	0.7
Tolerance	±7.5%

Coil Resistance

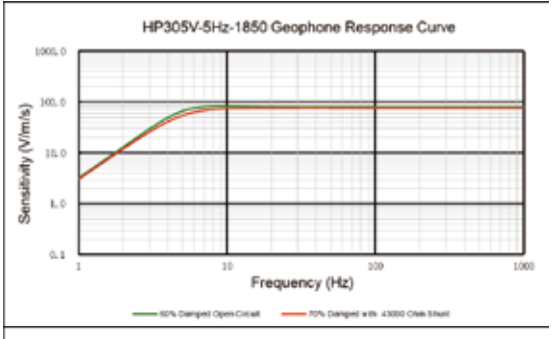
Standard	1850 ohm
Tolerance	±5%

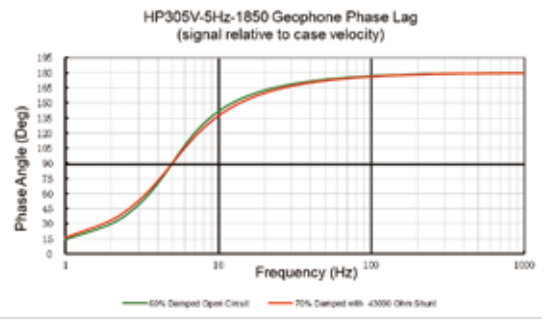
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	80 V/m/s (2.03 V/in/s)
Sensitivity with 43 kΩ load	76.7 V/m/s (1.95V/in/s)
Tolerance	±5%

Physical Characteristics

Moving Mass	22.7 g (0.801 oz)
Max. Coil Excursion p.p.	3mm (0.118 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	138 g (4.87 oz)
Operating Temperature Range	– 40°C - +80°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 5Hz Horizontal (HP305H)

(P/N:612200200)

Specifications

All parameters are specified at +22° C
in the horizontal position unless otherwise stated.



Frequency

Natural Frequency (Fn)	5Hz
Tolerance	±7.5%
Spurious Frequency	>150 Hz

Distortion

Distortion	< 0.1%
Distortion at Horizontal	0.05% Typical
Distortion from Horizontal to 3° Tilt	< 0.10% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.6
Damping with 43 kΩ load	0.7
Tolerance	±7.5%

Coil Resistance

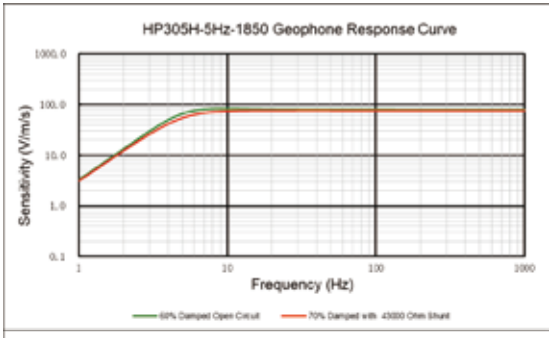
Standard	1850 ohm
Tolerance	±5%

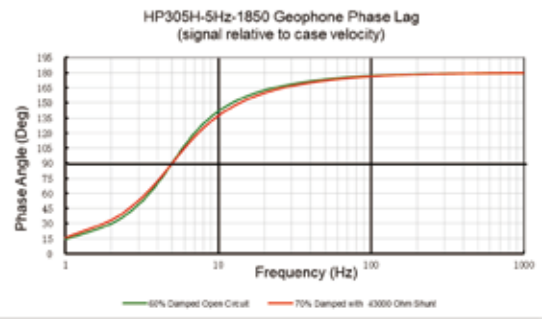
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	80 V/m/s (2.03 V/in/s)
Sensitivity with 43 kΩ load	76.7 V/m/s (1.95V/in/s)
Tolerance	± 5%

Physical Characteristics

Moving Mass	22.7 g (0.801 oz)
Max. Coil Excursion p.p.	3mm (0.118 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	138 g (4.87 oz)
Operating Temperature Range	– 40°C - +80°C





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DT-SOLO OMNI 14Hz (HP314)

(P/N:612900000)

Specifications

All parameters are specified at +25° C

Frequency

Natural Frequency (Fn)	14Hz
Tolerance	+ 10%, – 5%
Max. Tilt Angle for Specified	Horizontal to ± 90°
Spurious Frequency	>240Hz

Distortion

Distortion	< 0.2% (14 Hz with 0.2 in/s p-p)
	< 0.3% (14 Hz with 0.7 in/s p-p)

Damping

Open Circuit Damping	0.60
Damping with 20KΩ load	0.7
Tolerance	±10%

Coil Resistance

Standard	1565 ohm
Resistance with 20KΩ load	1451ohm
Tolerance	±5%

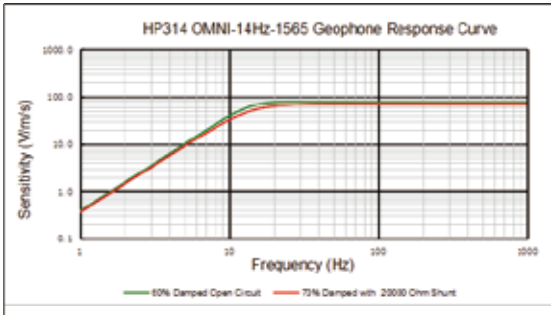
Sensitivity

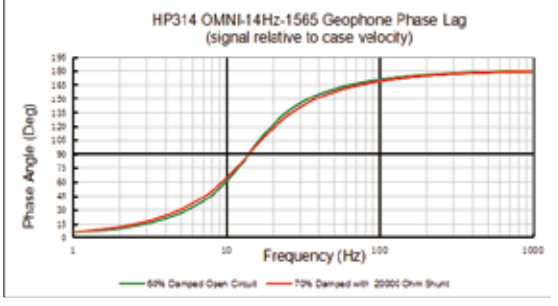
Open Circuit Intrinsic Voltage Sensitivity	74.8V/m/s (1.89V/in/s)
Sensitivity with 20KΩ load	69.6V/m/s (1.767V/in/s)
Tolerance	+ 5%, – 10%

Physical Characteristics

Moving Mass	13.2g (0.47 oz)
Max. Coil Excursion p.p.	4.06 mm (0.16 in)
Min. Coil Excursion p-p	1.02 mm (0.04 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	130 g (4.60 oz)
Operating Temperature Range	– 40°C - +90°C







Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-SOLO OMNI 15Hz (HP315)

(P/N:612600000)

Specifications

All parameters are specified at +25° C

Frequency

Natural Frequency (Fn)	15Hz
Tolerance	+ 10%, - 5%
Max. Tilt Angle for Specified	Horizontal to ± 90°
Spurious Frequency	>240Hz

Distortion

Distortion	< 0.2% (15 Hz with 0.2 in/s p-p)
	< 0.3% (15 Hz with 0.7 in/s p-p)

Damping

Open Circuit Damping	0.6
Damping with 20KΩ load	0.7
Tolerance	± 10%

Coil Resistance

Standard	1564ohm
Resistance with 20KΩ load	1455ohm
Tolerance	±5%

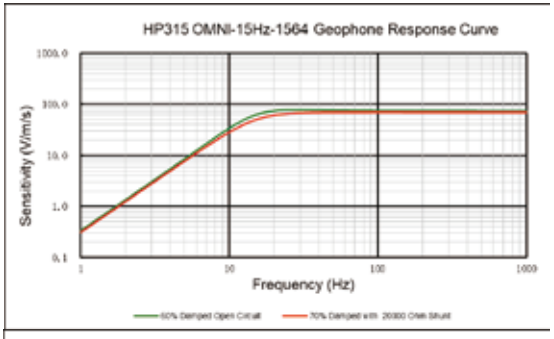
Sensitivity

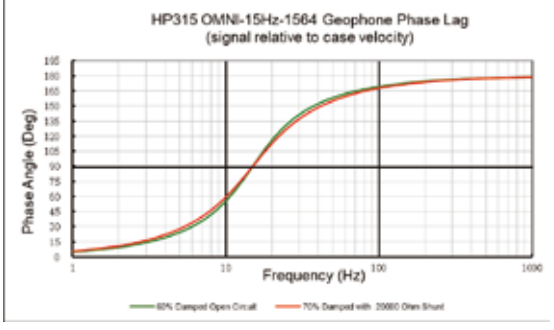
Open Circuit Intrinsic Voltage Sensitivity	74.8V/m/s (1.89 V/in/s)
Sensitivity with 20KΩ load	69.6 V/m/s (1.767 V/in/s)
Tolerance	+ 5%, - 10%

Physical Characteristics

Moving Mass	13.2g (0.47 oz)
Max. Coil Excursion p.p.	4.06 mm (0.16 in)
Min. Coil Excursion p-p	1.02 mm (0.04 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	130 g (4.60 oz)
Operating Temperature Range	- 40°C - +90°C







Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

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DT-SOLO 60Hz (HP360)

(P/N:613800000)

Specifications

All parameters are specified at +25° C

Frequency

Natural Frequency (Fn)	60Hz
Tolerance	± 5%
Spurious Frequency	>720Hz

Distortion

Distortion	< 0.2%
Distortion from Horizontal to ±90° Tilt	< 0.2% measured at 60 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.6
Damping with 5000Ω load	0.7
Tolerance	± 5%

Coil Resistance

Standard	1900ohm
Resistance with 5000Ω load	1376ohm
Tolerance	±5%

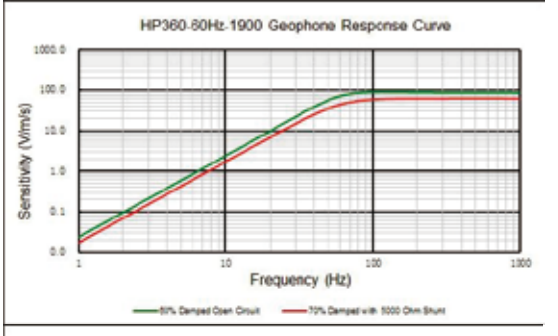
Sensitivity

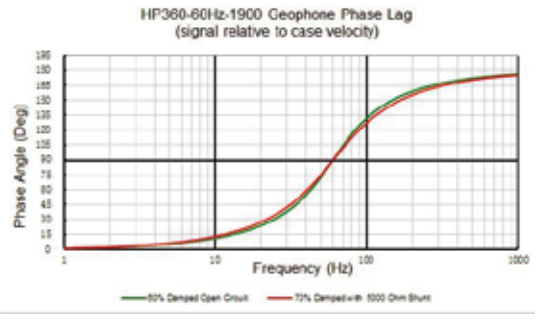
Open Circuit Intrinsic Voltage Sensitivity	85.8V/m/s (2.18 V/in/s)
Sensitivity with 5000Ω load	62.17 V/m/s (1.58 V/in/s)
Tolerance	± 5%

Physical Characteristics

Moving Mass	13 g (0.46 oz)
Max. Coil Excursion p.p.	0.5mm (0.02 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	126g (4.44 oz)
Operating Temperature Range	– 40°C - +80°C







Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-SOLO 4.5Hz Vertical (HP304V)

(P/N:613200100)

Specifications

All parameters are specified at +22° C
in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	4.5Hz
Tolerance	± 10%
Spurious Frequency	>150Hz

Distortion

Distortion	< 0.1%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 10° Tilt	< 0.1% measured at 12 Hz with 0.7 in/s p-p

Damping

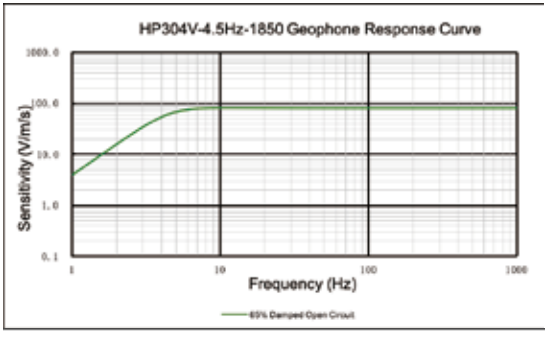
Open Circuit Damping	0.65
Tolerance	± 10%

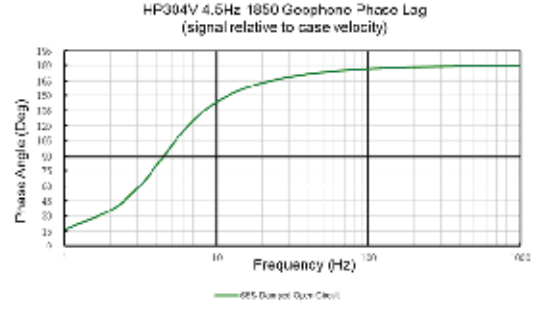
Coil Resistance

Standard	1850ohm
Tolerance	±5%

Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	80 V/m/s (2.03 V/in/s)
Tolerance	±5%





Physical Characteristics

Moving Mass	22.7 g (0.801 oz)
Max. Coil Excursion p.p.	3mm (0.118 in)
Diameter	30.5 mm (1.2 in)
Height	40.7 mm (1.6 in)
Weight	138 g (4.87 oz)
Operating Temperature Range	– 40°C - +80°C

Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-HP201-10Hz-350 Vertical

(P/N:611300100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±2.5%
Spurious Frequency	>240Hz

Distortion

Distortion	< 0.075%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 15° Tilt	< 0.075% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.68
Tolerance	±5%

Coil Resistance

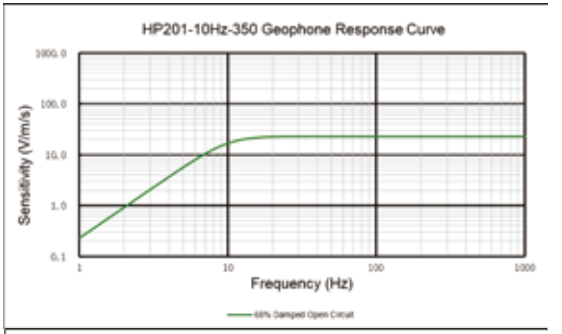
Standard	350ohm
Tolerance	± 3.5%

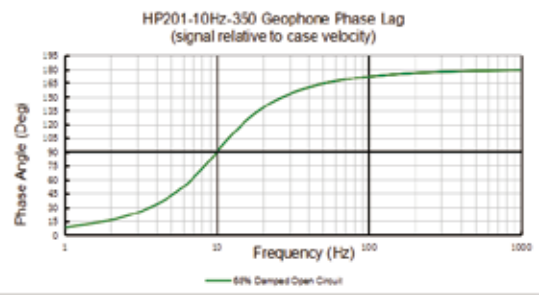
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	22.8V/m/s (0.58 V/in/s)
Tolerance	±3.5%

Physical Characteristics

Moving Mass	8.4 g (0.3 oz)
Max. Coil Excursion p.p.	1.78mm (0.07 in)
Diameter	27.4 mm (1.08 in)
Height	31.2mm (1.23 in)
Weight	78 g (2.75 oz)
Operating Temperature Range	– 40°C - +90°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-HP202-10Hz-350 Vertical

(P/N:613000100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±2.5%
Spurious Frequency	>260Hz

Distortion

Distortion	< 0.075%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 15° Tilt	<0.075% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.68
Tolerance	±5%

Coil Resistance

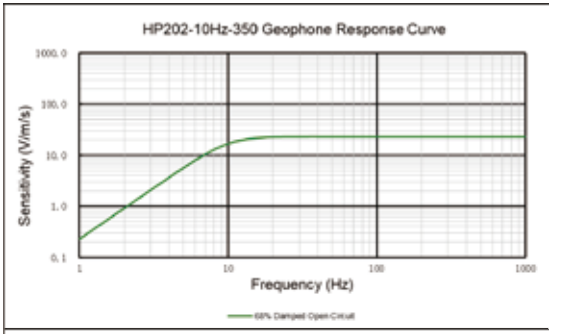
Standard	350ohm
Tolerance	±3.5%

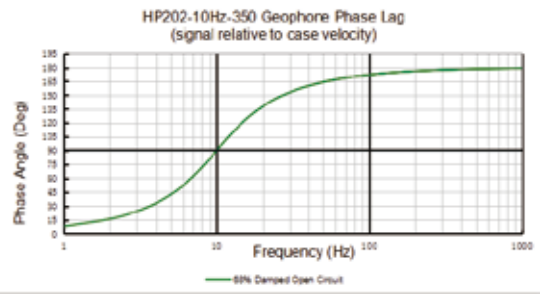
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	22.8V/m/s (0.58 V/in/s)
Tolerance	±2.5%

Physical Characteristics

Moving Mass	8.4 g (0.3 oz)
Max. Coil Excursion p.p.	1.78mm (0.07 in)
Diameter	25.4mm (1.0 in)
Height	31.2mm (1.23in)
Weight	73 g (2.57 oz)
Operating Temperature Range	– 40°C - +90°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC
DYNAMIC TECHNOLOGIES

DT-HP204-10Hz-292 Vertical

(P/N:611400100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

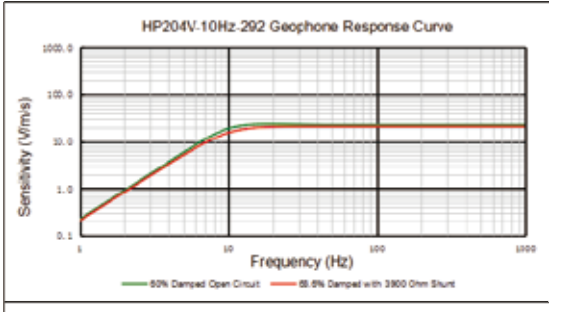
Natural Frequency (Fn)	10Hz
Tolerance	±2.5%
Spurious Frequency	>260Hz

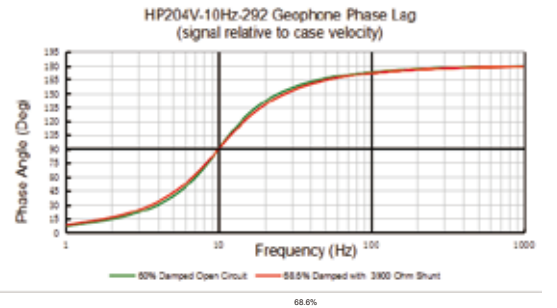
Distortion

Distortion	< 0.075%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 10° Tilt	< 0.075% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.6
Damping with 3900 Ω load	0.686
Tolerance	+5%, -0%





68.6%

Coil Resistance

Standard	292ohm
Resistance with 3900 Ω load	273ohm
Tolerance	± 2.5%

Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	22.5 V/m/s (0.57 V/in/s)
Sensitivity with 3900 Ω load	20.9 V/m/s (0.53V/in/s)
Tolerance	±2.5%

Physical Characteristics

Moving Mass	11 g (0.38 oz)
Max. Coil Excursion p.p.	2mm (0.08 in)
Diameter	25.4 mm (1.0 in)
Height	31.2mm (1.23 in)
Weight	75 g (2.65 oz)
Operating Temperature Range	40°C - +90°C

Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-HP206-4.5Hz Vertical

(P/N:611500100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	4.5Hz
Tolerance	±0.5Hz
Spurious Frequency	>120Hz

Distortion

Distortion	< 0.3%
Distortion at vertical	< 0.3% measured at 12 Hz with 0.7 in/s p-p

Damping

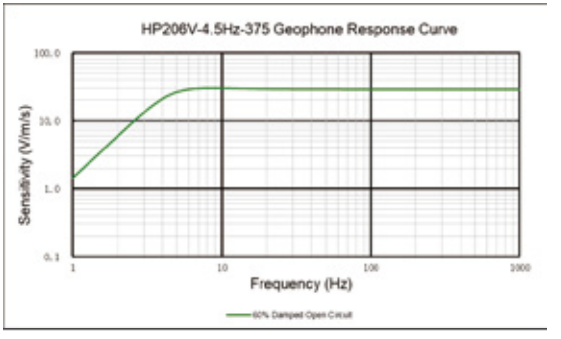
Open Circuit Damping	0.6
Tolerance	±5%

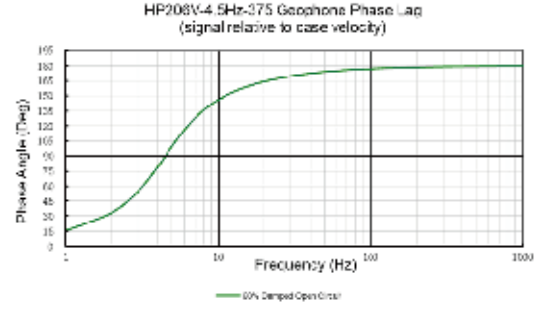
Coil Resistance

Standard	375ohm
Tolerance	± 5%

Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	28.8V/m/s (0.73 V/in/s)
Tolerance	±5%





Physical Characteristics

Moving Mass	11 .1g (0.39 oz)
Max. Coil Excursion p.p.	4mm (0.16 in)
Diameter	25.4 mm (1.0 in)
Height	36mm (1.4 in)
Weight	81 g (2.86 oz)
Operating Temperature Range	– 40°C - +90°C

Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-HP206-4.5Hz Horizontal

(P/N:611500200)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	4.5Hz
Tolerance	±0.5Hz
Spurious Frequency	>120Hz

Distortion

Distortion	< 0.3%
Distortion at horizontal	< 0.3% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.6
Tolerance	±5%

Coil Resistance

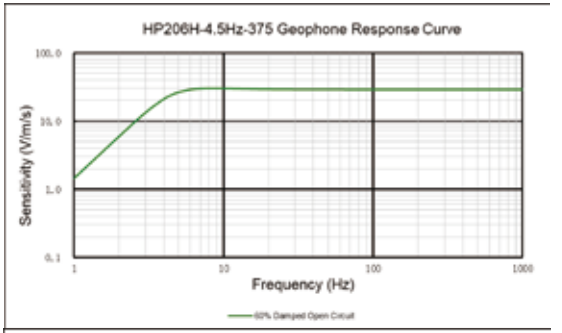
Standard	375ohm
Tolerance	± 5%

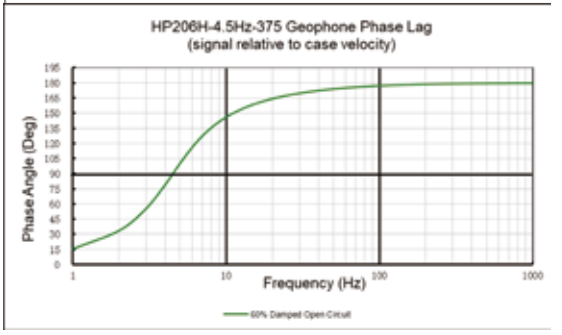
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	28.8V/m/s (0.73 V/in/s)
Tolerance	±5%

Physical Characteristics

Moving Mass	11 .1g (0.39 oz)
Max. Coil Excursion p.p.	4mm (0.16 in)
Diameter	25.4 mm (1.0 in)
Height	36mm (1.4 in)
Weight	81 g (2.86 oz)
Operating Temperature Range	– 40°C - +90°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-HP102-10Hz-395 Vertical

(P/N:611000100)

Specifications

All parameters are specified at +25° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±2.5%
Spurious Frequency	>250Hz

Distortion

Distortion	< 0.1%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 20° Tilt	< 0.1% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.316
Damping with 1000 Ω load	0.7
Tolerance	±2.5%

Coil Resistance

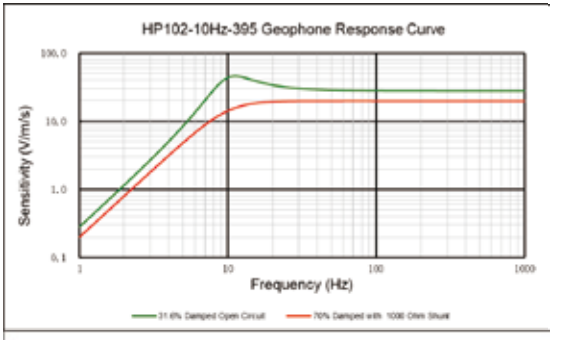
Standard	395ohm
Resistance with 1000 Ω load	283 ohm
Tolerance	± 2.5%

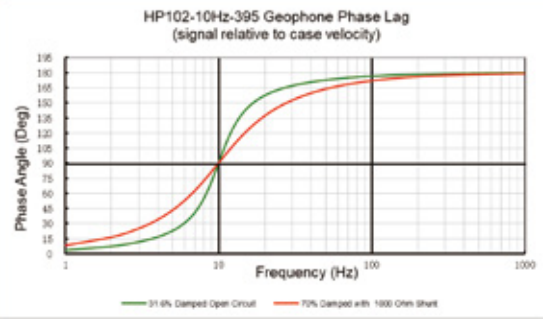
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	27.5 V/m/s (0.698 V/in/s)
Sensitivity with 1000 Ω load	19.7 V/m/s (0.500 V/in/s)
Tolerance	±2.5%

Physical Characteristics

Moving Mass	11.2 g (0.395 oz)
Max. Coil Excursion p.p.	1.52 mm (0.060 in)
Diameter	25.4 mm (1.0 in)
Height	33.0 mm (1.30 in)
Weight	86 g (3.03 oz)
Operating Temperature Range	– 40°C - +100°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-HP103-10Hz-375 Vertical

(P/N:611100100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±2.5%
Spurious Frequency	>240Hz

Distortion

Distortion	< 0.1%
Distortion at vertical	0.05% Typical
Distortion from Vertical to 10° Tilt	< 0.1% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.25
Damping with 1000 Ω load	0.686
Tolerance	+ 5% - 0%

Coil Resistance

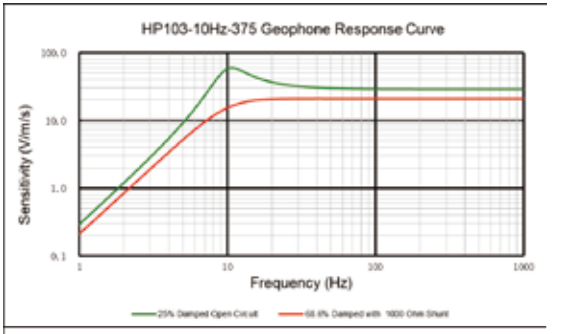
Standard	375ohm
Resistance with 1000 Ω load	273 ohm
Tolerance	± 2.5%

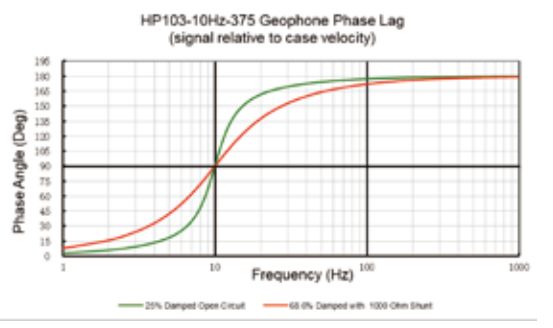
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	28.8 V/m/s (0.73 V/in/s)
Sensitivity with 1000 Ω load	20.9 V/m/s
Tolerance	±2.5%

Physical Characteristics

Moving Mass	11 g (0.38 oz)
Max. Coil Excursion p.p.	2 mm (0.08 in)
Diameter	25.4 mm (1.0 in)
Height	32.0 mm (1.26 in)
Weight	85 g (3.0 oz)
Operating Temperature Range	– 40°C - +100°C





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-HP104-10Hz-375 Vertical

(P/N:611200100)

Specifications

All parameters are specified at +20° C in the vertical position unless otherwise stated.



Frequency

Natural Frequency (Fn)	10Hz
Tolerance	±5%
Spurious Frequency	>240Hz

Distortion

Distortion	< 0.2%
Distortion at vertical	0.1% Typical
Distortion from Vertical to 10° Tilt	< 0.2% measured at 12 Hz with 0.7 in/s p-p

Damping

Open Circuit Damping	0.25
Damping with 1000 Ω load	0.686
Tolerance	± 5%

Coil Resistance

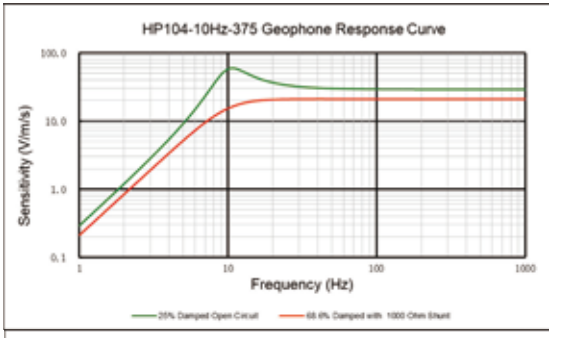
Standard	375ohm
Resistance with 1000 Ω load	273 ohm
Tolerance	± 5%

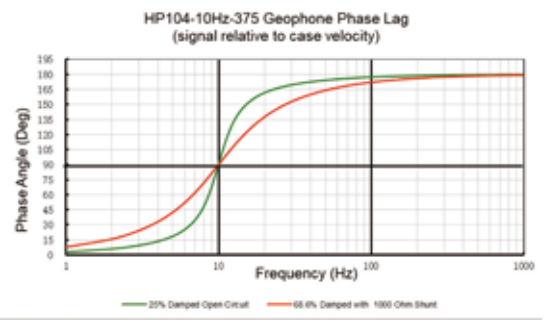
Sensitivity

Open Circuit Intrinsic Voltage Sensitivity	28.8 V/m/s (0.73 V/in/s)
Sensitivity with 1000 Ω load	20.9 V/m/s
Tolerance	±5%

Physical Characteristics

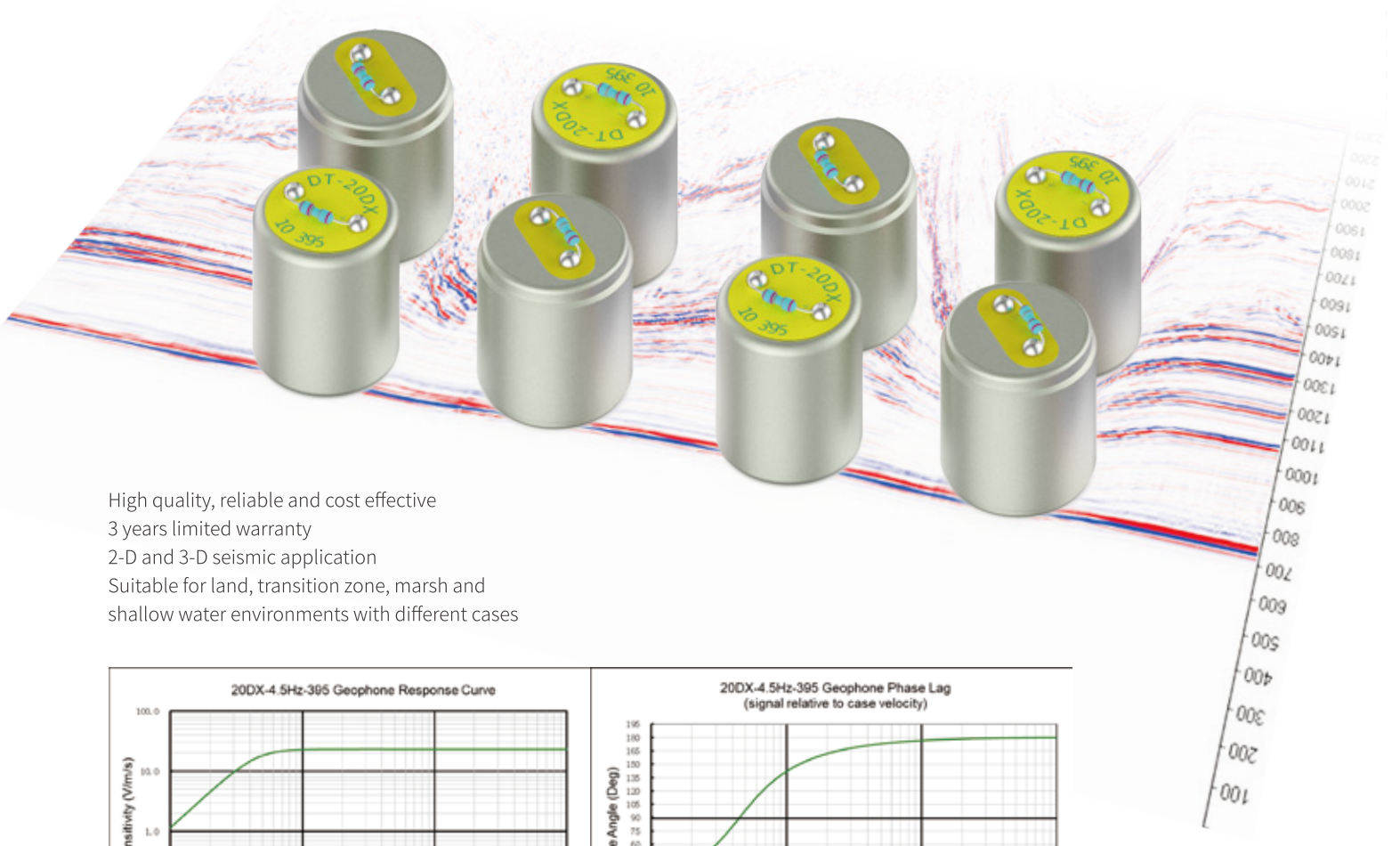
Moving Mass	11 g (0.38 oz)
Max. Coil Excursion p.p.	2 mm (0.08 in)
Diameter	25.4 mm (1.0 in)
Height	32.0 mm (1.26 in)
Weight	85 g (3.0 oz)
Operating Temperature Range	– 40°C - +100°C



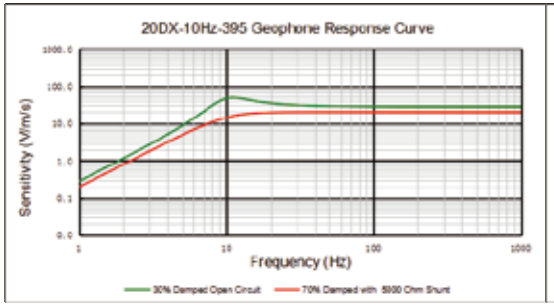


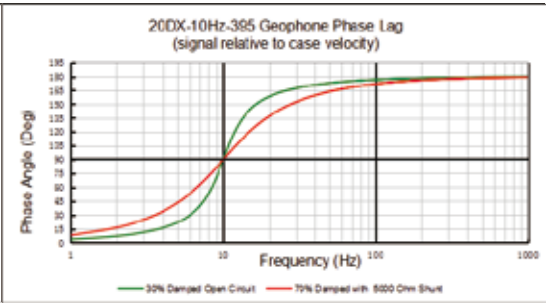
Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-20DX
Geophone Element



High quality, reliable and cost effective
3 years limited warranty
2-D and 3-D seismic application
Suitable for land, transition zone, marsh and
shallow water environments with different cases





P/N	611900100	610100100	610200100	610300100	610400000	610600000	610700000	613900100	610800000
Type	20DX-4.5Hz	20DX-8Hz	20DX-10Hz	20DX-14Hz	20DX-28Hz	20DX-35Hz	20DX-40Hz	20DX-60Hz	20DX-100Hz
Natural Frequency (Hz)	4.5±0.5Hz	8±5%	10±5%	14±5%	28±5%	35±5%	40±5%	60±5%	100±5%
Open Circuit Damping	0.7	0.38	0.3	0.22	0.27	0.39	0.37	0.457	0.54
Shunt Resistor: Damping - 1k ohm		0.71±5%	0.70±5%	0.51±5%	0.552±5%				
Damping - 1500 ohm						0.612±5%	0.57±5%	0.6±5%	0.65±5%
Open Circuit Intrinsic Voltage Sensitivity (V/m/s)	23.4±10%	28	28	28	39	41	42	39	49.3
Sensitivity with Shunt Resistor (V/m/s)		23±5%	20±5%	20.1±5%	28±5%	29.6±5%	30.4±5%	27±5%	32±5%
Coil Resistance (Ohm)	395±5%	395±5%	395±5%	395±5%	395±5%	575±5%	575±5%	668±5%	808±5%
Harmonic Distortion (%)	≤0.30	≤0.20	≤0.20	≤0.20	≤0.20	≤0.20	≤0.20	≤0.20	≤0.20
Typical Spurious Frequency (Hz)	>160	>180	>200	>240	>350	>350	>380	>200	>200
Moving Mass (g)	11					8.2	8.2	6.5	7.6
Typical Case to Coil Motion (p-p) (mm)	1.5 (p-p)								
Allowable Tilt	0°	20°			90°				
Unit Diameter (mm)	25.4				27				
Unit Height (mm)	33.5								
Unit Mass (g)	86					97			
Operating Temperature(°C)	- 40°C to +100°C			- 40°C to +70°C	- 40°C to +100°C				

DTCC
DYNAMIC TECHNOLOGIES

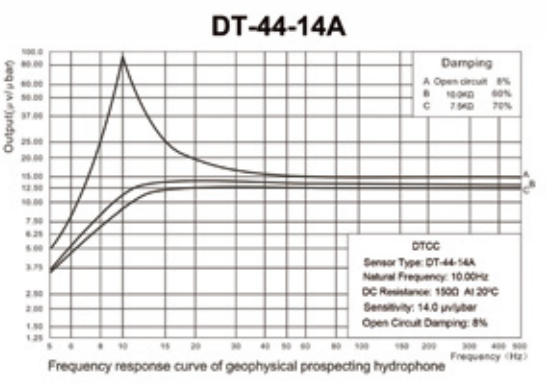
DT-44-14A

(P/N:611700300)

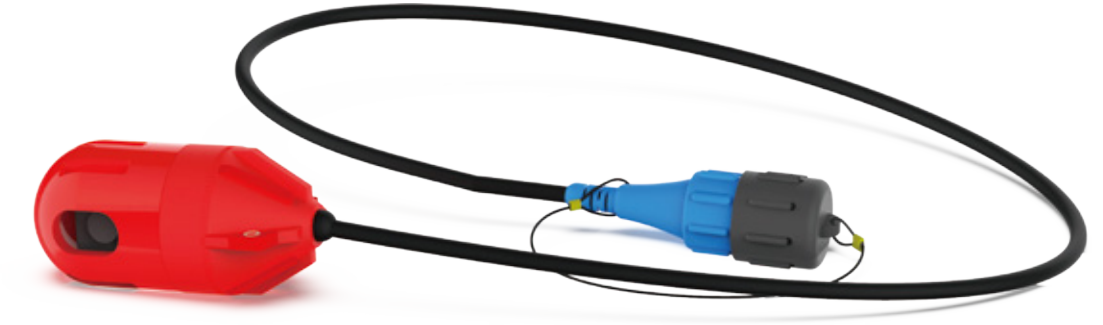
Natural Frequency (±15 %)	10 Hz
Voltage Sensitivity (±1.5 dB)	14 volts/bar
DC Resistance (±10%)	150 ohms
Operating Temperature	0°C to 35°C
Operational Depth	0.3 - 75m
Standard Cable Sizes	0.310 in (0.79 cm)
Polarity	SEG

Dimensions (without outer case)

Length	12.4 cm
Diameter	5.3 cm
Weight	400 g (with one meter cable)



Frequency response curve of geophysical prospecting hydrophone



Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DTCC DYNAMIC TECHNOLOGIES

DT-25-11A / DT-25-14A

DT-25-11A (P/N:611700100)

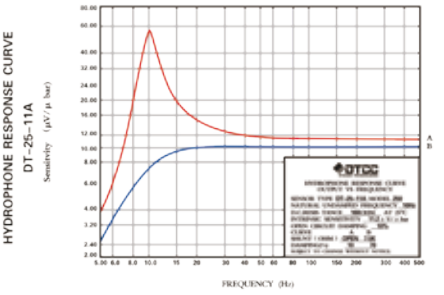
DT-25-14A (P/N:611700200)

Natural Frequency (±15 %)	10 Hz
Voltage Sensitivity (±1.5 dB)	11.2 volts/bar 14 volts/bar
DC Resistance (±10%)	160 ohms
Operating Temperature	0°C to 35°C
Operational Depth	0.3 - 75m
Standard Cable Sizes	0.310 in (0.79 cm)
Polarity	SEG

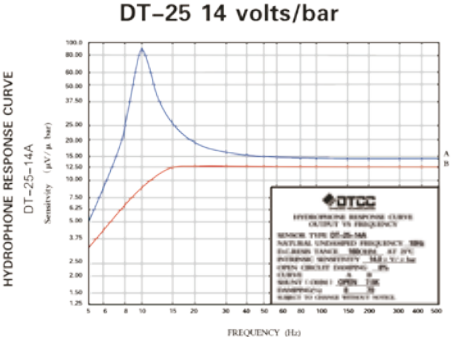
Dimensions (without outer case)

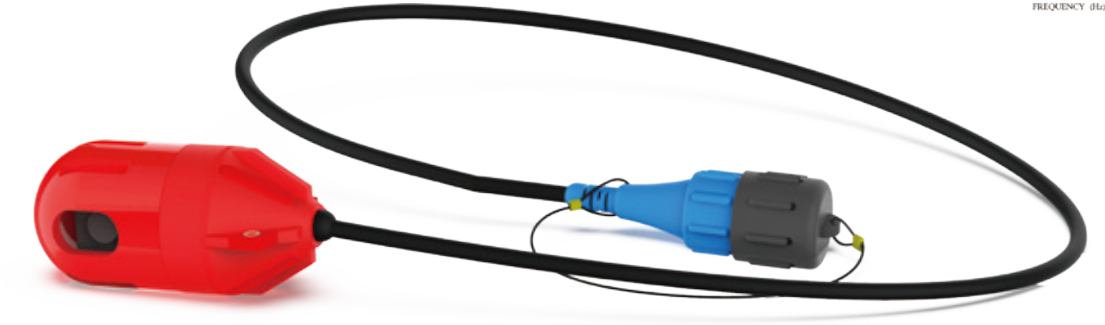
Length	12.4 cm
Diameter	5.3 cm
Weight	400 g (with one meter cable)

DT–25 11.2 volts/bar



DT–25 14 volts/bar





Warranty excludes damage caused by high voltage and physical damage to the element case.
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-HP321-01

(P/N:611800200)

Dual Sensor

Unique Quad Spring Contact Design, Greatly improves signal transmission and reliability
New rotation mechanism and optimized damping formula reduces internal noise interference
Field Repairable, Helps reduce TZ operation costs
Optimized case shape, helps improve signal coupling



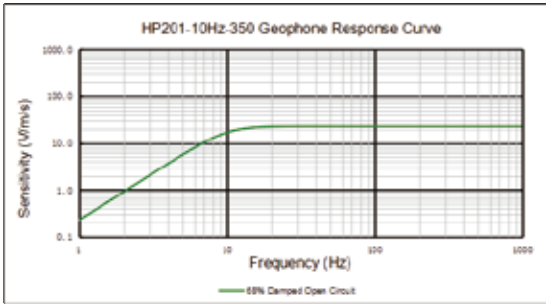
GEOPHONE

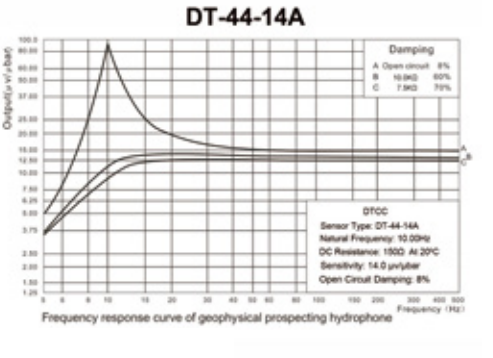
Type	DT-HP201(Equivalent to SG10)
Natural Frequency	10 Hz (± 2.5%)
Resistance	700 ohm (± 3.5%)
Sensitivity	45.6 V/m/s (± 2.5%)
	All Parameters are Specified at 20° C

HYDROPHONE

Type	DT-44-14A
Natural Frequency	10 Hz (± 10%)
Resistance	150 ohm (± 10%)
Sensitivity	14 V/bar (± 1.5 dB)
	All Parameters are Specified at 20° C

Depth Limit	0.3 - 75 m
Operating Temperature	0° C to +35° C
Length	355 mm (13.97 in)
Diameter	55 mm (2.16 in)
Weight of the Dual Sensor with Connector and 1.2 m Cable	3.6 kg (7.94 lbs)





DT-HP321-02

(P/N:611800100)

Dual Sensor

Unique Quad Spring Contact Design, Greatly improves signal transmission and reliability
New rotation mechanism and optimized damping formula reduces internal noise interference
Field Repairable, Helps reduce TZ operation costs
Optimized case shape, helps improve signal coupling



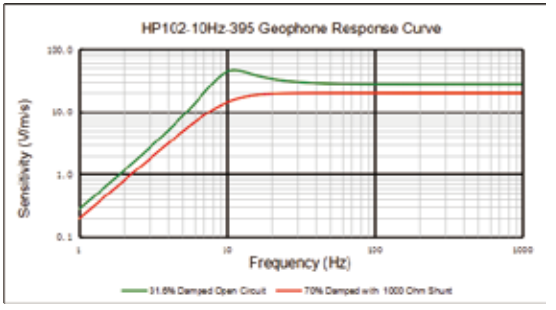
GEOPHONE

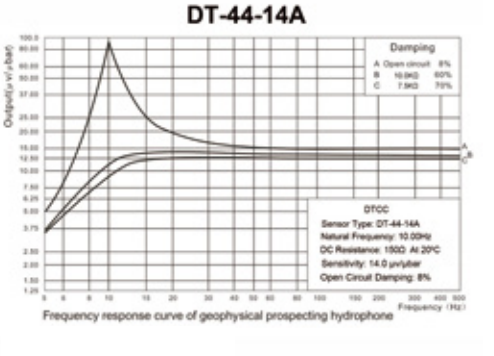
Type	DT-HP102 (Equivalent to 32CT)
Natural Frequency	10 Hz (± 2.5%)
Resistance	566 ohm (± 2.5%)
Sensitivity	39.4 V/m/s (± 2.5%)
	All Parameters are Specified at 20° C

HYDROPHONE

Type	DT-25-14A
Natural Frequency	10 Hz (± 10%)
Resistance	160 ohm (± 10%)
Sensitivity	14 V/bar (± 1.5 dB)
	All Parameters are Specified at 25° C

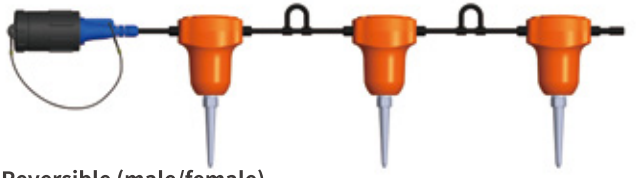
Depth Limit	0.3 - 75 m
Operating Temperature	0° C to +35° C
Length	355 mm (13.97 in)
Diameter	55 mm (2.16 in)
Weight of the Dual Sensor with Connector and 1.2 m Cable	3.6 kg (7.94 lbs)





String Configurations

Standard (male)
A standard geophone string with one connector is manufactured for a specific configuration



Reversible (male/female)
A reversible geophone string gives the crew the ability to connect from either connector and providing greater flexibility during deployment



Extension (male/female)
An extension geophone string enables the crew to connect two or more geophone strings to each other for a unique array configuration



Global Leading Manufacturer of Geophones
Geophones & Hydrophones



Suitable for land,transition zone,marsh and shallow water environments with different cases.

With the diverse and extreme conditions seismic contractors find themselves in, DTCC has the ability to provide the correct configuration each and every time. We will customize the string configuration that best meets the customer requirement for their initial prospect and beyond for many years of continued service. Our products are designed and manufactured to meet the toughest and diverse terrains from Land (Urban, Desert to Arctic) to Transition Zone/Marsh Zones to Marine environments. We use the best primary base materials in order to build the best quality products possible, this allows our equipment to function properly in all conditions and terrains for many years of exceptional service.

Geophone Case Types

Product Name:
DLC1 Land Case
Part Number: 622400000
Used With:
HP103, HP104, HP204, HP202



Product Name:
DLC2 Land Case
Part Number: 620100000
Used With:
20 DX Series
(4.5Hz, 10Hz, 28Hz, 40Hz, 100Hz)



Product Name:
DLC9 Land Case
Part Number: 620600000
Used With:
HP-102



Product Name:
DLC10 Land Case
Part Number: 620700000
Used With:
HP201



Product Name:
DMC10 Marsh Case
Part Number: 621600000
Used With:
HP201



Product Name:
DMC3 Marsh Case
Part Number: 621100000
Used With:
HP-102, 20DX-10HZ HP103, HP104



Product Name:
DMC8 Marsh Case with
Aluminum Protector
Part Number: 621400200
Used With:
SOLO Series



Product Name:
DLC6 Land Case
Part Number: 620400000
Used With:
SOLO Series



Product Name:
DMC8 Marsh Case
Part Number: 621400000
Used With:
SOLO Series



Product Name:
Horizontal 3C Case D3C-H1-01
Part Number: 621700000
Used With:
HP-102 20DX-4.5Hz 20DX-10Hz



Product Name:
Vertical 3C Case D3C-V1-02
Part Number: 622200000
Used With:
HP204



Product Name:
Horizontal 3C Case D3C-H1-02
Part Number: 621800000
Used With:
HP204 HP103



Product Name:
Vertical 3C Case D3C-V1-01
Part Number: 622100000
Used With:
HP-102 20DX-4.5Hz 20DX-10Hz



Product Name:
Horizontal 3C Case D3C-H3
Part Number: 622000000
Used With:
SOLO Series



Product Name:
Vertical 3C Case D3C-V3
Part Number: 622300000
Used With:
SOLO Series



Product Name:
Horizontal 3C Case D3C-H2
Part Number: 621900000
Used With:
HP206



Connector Types

DCK Waterproof

Female
Part Number: 810100000



Male
Part Number: 811000000



DCK Wetproof

Female
Part Number: 810300000



Male
Part Number: 810200000



DCL Wetproof

Female
Part Number: 810800000



Male
Part Number: 810700000



Dual Connector

DCK Male-Female Waterproof Connector
Part Number: 810400000



DCK Male-Female Wetproof Connector
Part Number: 810500000



DCL Double End Wetproof Connctor
Part Number: 810900000



DTCC
DYNAMIC TECHNOLOGIES

DTCC LEADER WIRES (DLW)

DLW	–	2	–	70	–	180	–	F
1		2		3		4		5



1 Manufacturer brand

2 Number of conductors
Typical number of conductor: 2, 3.

3 Break strength per conductor lbs
Typical break strength of each conductor.70lbs, 100lbs, 225lbs.

4 Wire OD
Wire outside diameter in inches (Typically)
I.E 0.18",0210",0250"0310".

5 Indicates gel filled
"F" Indicates the Wire is filled with water blocking gel



D-loop optons: Molded, Clip-on Poly D-loop or metal D-loop at specified intervals.

Type Number	O.D.		Break Strength		Weight		ohms	
	in	mm	lbs	kg	lb/mft	kg/km	mft	km
DLW-2-70-180	0.180	4.57	140	63.5	16.0	23.8	35.1	115
DLW-2-70-180 F	0.180	4.57	140	63.5	15.7	23.4	35.1	115
DLW-3-70-180	0.180	4.57	210	95.3	17.7	26.3	35.1	115
DLW-3-70-180 F	0.180	4.57	210	95.3	17.5	26.0	35.1	115
DLW-2-70-210	0.210	5.33	140	63.5	20.0	29.8	35.1	115
DLW-2-70-210 F	0.210	5.33	140	63.5	19.8	29.5	35.1	115
DLW-3-70-210	0.210	5.33	210	95.3	21.8	32.4	35.1	115
DLW-3-70-210 F	0.210	5.33	210	95.3	21.6	32.1	35.1	115
DLW-2-70-250	0.250	6.35	140	63.5	27.7	41.2	35.1	115
DLW-2-70-250 F	0.250	6.35	140	63.5	27.4	40.8	35.1	115
DLW-3-70-250	0.250	6.35	210	95.3	29.4	43.7	35.1	115
DLW-3-70-250 F	0.250	6.35	210	95.3	29.2	43.4	35.1	115
DLW-2-100-180	0.180	4.57	200	90.7	18.1	26.9	24.1	79
DLW-2-100-180 F	0.180	4.57	200	90.7	17.7	26.4	24.1	79
DLW-2-100-210	0.210	5.33	200	90.7	22.2	33.0	24.1	79
DLW-2-100-210 F	0.210	5.33	200	90.7	21.8	32.5	24.1	79
DLW-3-100-210	0.210	5.33	300	136.1	25.0	37.2	24.1	79
DLW-3-100-210 F	0.210	5.33	300	136.1	24.7	36.7	24.1	79
DLW-2-100-225	0.225	5.71	200	90.7	24.8	36.9	24.1	79
DLW-2-100-225 F	0.225	5.71	200	90.7	24.4	36.3	24.1	79
DLW-3-100-225	0.225	5.71	300	136.1	27.6	41.1	24.1	79
DLW-3-100-225F	0.225	5.71	300	136.1	27.3	40.6	24.1	79
DLW-2-100-250	0.250	6.35	200	90.7	29.8	44.3	24.1	79
DLW-2-100-250F	0.250	6.35	200	90.7	29.4	43.8	24.1	79
DLW-3-100-250	0.250	6.35	300	136.1	32.6	48.5	24.1	79
DLW-3-100-250F	0.250	6.35	300	136.1	32.3	48.0	24.1	79
DLW-2-100-310	0.310	7.87	200	90.7	41.5	61.8	24.1	79
DLW-2-100-310F	0.310	7.87	200	90.7	41.2	61.3	24.1	79
DLW-3-100-310	0.310	7.87	300	136.1	44.4	66.0	24.1	79
DLW-3-100-310F	0.310	7.87	300	136.1	44.0	65.5	24.1	79
DLW-2-225-310F	0.310	7.87	450	204.1	48.4	71.98	8.8	29

DTCC
DYNAMIC TECHNOLOGIES

SoloChecker™
SCG-900 Geophone Tester



Specifications

Measurement Capability at +20° C

Natural Frequency
Range: 1 to 100Hz
Accuracy: 1 to 15Hz: ±0.3° C
Other: ±2%
Display resolution: 0.01Hz

Coil Resistance
Range: 5Ω~50kΩ
Accuracy: ±0.1%
Display resolution：1Ω

Damping
Range: 0.100 to 0.850
Accuracy: ±0.1%
Display resolution: 0.001

Sensitivity
Range: 1 to 999 V/m/s
Accuracy: ±0.5%
Display resolution: 0.1V/m/s

Harmonic Distortion
Range: 0 to 20%
Accuracy: ±0.01% distortion
Display resolution: 0.001%

Impedance
Range: 0Ω to 200KΩ

Leakage Test
Range: 1MΩ to 100MΩ
Accuracy:±5%
Display resolution: 0.IMΩ

Physical Characteristics
Dimensions: 148mmx91mmx27mm
Weight: 600g

Environment Specifications
Operating temperature range: -20°C to 50°C
Storage temperature range: -30°C to 70°C
Humidity: 95% non-condensing
Housing standard: IP65

SoloChecker™
SCG-900 Geophone Tester



- **High-speed High-accuracy** Measurement
- **Waterproof** Rugged Metal Body
- Portable Style of **Small Size And Light Weight**
- Clear Display At **Super High Brightness**
- **48 Hours** Ultra-long Battery Life
- USB Drive Mode For **Simplified Data Transmission**
- **User-friendly** Interactive Design

Perceive the Complex World Easily

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