

dipperLog 128+, Tough+,
Vented+, 64+, 32+
Data Loggers



Extremely Accurate Groundwater Pressure & Temperature Readings

Heron Instruments' +Series of dipperLogs incorporate a **NIST Traceable** temperature sensor for some of the most accurate temperature readings you can find in a groundwater data logger (N/A: dipperLog 64+ & dipperLog 32+)

Memory Capacity

dipperLog 128+, Tough+, Vented+ and barLog all have a memory capacity of **128,000** data sets allowing for plenty of data collection over the course of your project.

Battery Life+

With increased memory, requires increased battery life. In ideal conditions, the dipperLog 128+, Tough+, Vented+ and barLog will last up to 15 years in the field or up to 5,000,000 total readings.



Titanium Tough+ Model

The premium dipperLog Tough+ Groundwater Data Logger is manufactured with a durable **Titanium** body. The primary O-Ring is made of **Teflon™** to protect the **Titanium Piezoresistive Silicon** transducer within the logger. This logger is suitable for use in the most caustic and hazardous monitoring environments.

Fast, User-Friendly, Capable - dipperLog Software

All of the + series of dipperLogs are compatible with the userfriendly dipperLog Software. Within the dipperLog Software, users are able to **download**, **export** and **barometrically compensate** their collected data. Our best-in-class download





Data Logger Specifications

		Absolute Groundwater Data Loggers			
	Logger Type	dipperLog TOUGH+	dipperLog 128+	dipperLog 64+	dipperLog 32+
Performance	# of Data Sets	128,000	128,000	64,000	32,000
	Download Speed	21,333.33 Data Sets/min (128,000 readings download in 6 minutes)	21,333.33 Data Sets/min (128,000 readings download in 6 minutes)	21,333.33 Data Sets/min (64,000 readings download in 3 minutes)	21,333.33 Data Sets/min (32,000 readings download in 1.5 minutes)
	Water Level Accuracy (Typical)	+/- 0.05%FS (0°C to 50°C)	+/- 0.05%FS (0°C to 50°C)	+/- 0.05%FS (0°C to 50°C)	+/- 0.1%FS (0°C to 40°C)
	Temperature Accuracy (Typical)	+/- 0.05°C Temperature Sensor Meets ASTM E1112 and ISO 80601-2-56. NIST Traceability.	+/- 0.05°C Temperature Sensor Meets ASTM E1112 and ISO 80601-2-56. NIST Traceability.	+/- 0.5°C	+/- 0.5°C
Operating Features	Pressure Ranges	10m/30ft (14PSI), 30m/100ft (43PSI), 60m/200ft (85PSI), 120m/400ft (171PSI)	10m/30ft (14PSI), 30m/100ft (43PSI), 60m/200ft (85PSI), 120m/400ft (171PSI)	10m/30ft (14PSI), 30m/100ft (43PSI), 60m/200ft (85PSI), 120m/400ft (171PSI)	30m/100ft (43PSI)
	Overpressure Rating	2X Factory Calibrated Range	2X Factory Calibrated Range	2X Factory Calibrated Range	2X Factory Calibrated Range
	Operating Temperature	-20°C to 80°C (-5°F to 175°F)	-20°C to 80°C (-5°F to 175°F)	-20°C to 80°C (-5°F to 175°F)	-20°C to 80°C (-5°F to 175°F)
	Pressure Resolution %FS	0.001	0.001	0.001	0.01
	Battery Life (Depending On Usage)	Up to 5,000,000 Readings Up to 15 Years	Up to 5,000,000 Readings Up to 15 Years	Up to 3,750,000 Readings Up to 10 Years	Up to 2,500,000 Readings Up to 5 Years
	Warranty	3 Years	3 Years	2 Years	1 Year
Physical Characteristics	Wetted Material	Titanium, Delrin®, Teflon™	316 SS, Delrin®, Buna-N	316 SS, Delrin®, Buna-N	316 SS, Delrin®, Buna-N
	O-Ring (Primary)	Teflon™	Buna-N	Buna-N	Buna-N
	O-Ring (Backup)	Viton	Viton	Viton	Viton
	Transducer	Titanium Piezoresistive Silicon	316 SS Piezoresistive Silicon	316 SS Piezoresistive Silicon	316 SS Piezoresistive Silicon
	Length	145mm / 5.7"	145mm / 5.7"	145mm / 5.7"	145mm / 5.7"
	Diameter	22mm / 0.87"	22mm / 0.87"	22mm / 0.87"	22mm / 0.87"
	Weight	150g	170g	170g	170g
	Deployment Options	Suspended, Direct Read, Reel	Suspended, Direct Read, Reel	Suspended, Direct Read, Reel	Suspended, Direct Read, Reel

		<u>Vented</u> Groundwater Data Loggers	<u>Barometric</u> Loggers	
	Logger Type	dipperLog VENTED+	barLog	
Operating Features Performance	# of Data Sets	128,000	128,000	
	Download Speed	21,333.33 Data Sets/min (128,000 readings download in 6 minutes)	21,333.33 Data Sets/min (128,000 readings download in 6 minutes)	
	Water Level Accuracy (Typical)	+/- 0.05%FS (0°C to 50°C)	+/- 0.05%FS (0°C to 50°C)	
	Temperature Accuracy (Typical)	+/- 0.05°C Temperature Sensor Meets ASTM E1112 and ISO 80601-2-56. NIST Traceability.	+/- 0.05°C Temperature Sensor Meets ASTM E1112 and ISO 80601-2-56. NIST Traceability.	
	Pressure Ranges	10m/30ft (14PSI), 30m/100ft (43PSI), 60m/200ft (85PSI), 120m/400ft (17TPSI)	N/A	
	Overpressure Rating	2X Factory Calibrated Range	2X Factory Calibrated Range	
	Operating Temperature	-20°C to 80°C (-5°F to 175°F)	-20°C to 80°C (-5°F to 175°F)	
	Pressure Resolution %FS	0.001	0.001	
	Battery Life (Depending On Usage)	Up to 5,000,000 Readings Up to 15 Years	Up to 5,000,000 Readings Up to 15 Years	
	Warranty	3 Years	3 Years	
Physical Characteristics	Wetted Material	316 SS, Delrin®, Buna-N	N/A	
	O-Ring (Primary)	Buna-N	Buna-N	
	O-Ring (Backup)	Viton	Viton	
	Transducer	316 SS Piezoresistive Silicon	316 SS Piezoresistive Silicon	
	Length	145mm / 5.7"	145mm / 5.7"	
	Diameter	22mm / 0.87"	22mm / 0.87"	
	Weight	170g	170g	
	Deployment Options	Direct Read	N/A	