

M-SERIES HDD BEACONS

Introducing the most versatile HDD Guidance Beacons on the market – the all-new M-Series. Available in three standard sizes: M10, M15, and M17, these beacons are designed to handle everything from the simplest shots to the most challenging tasks.



FEATURES AND BENEFITS

FIELD CONFIGURABLE POWER LEVELS help extend battery life and performance at depth.

AUTOMATIC TUNING CIRCUITRY delivers consistent operation in variety of downhole tools .

AUTOMATIC WIRELESS BEACON connect ability to configure and overcome any interference you may encounter while turning right downhole.

HIGHER-GRADE COMPONENTS increase maximum operational temperature ranging from 180F to 221F.

LOW FREQUENCY CAPABILITY enables you to work around passive interferences such as rebar.



M-SERIES BEACON SPECIFICATIONS

M10 SERIES

MODEL ID	FREQUENCY	DEPTH RANGE	BATTERY LIFE	MAXIMUM TEMPERATURE	DIMENSIONS	PITCH RESOLUTION
M10	29 kHz	55 ft (16.7m)	16 hrs	180° F (82° C)	10.62 x .9 in. (269.24 x 19 mm)	1%

M15 SERIES

MODEL ID	FREQUENCY	DEPTH RANGE		BATTERY LIFE		MAXIMUM TEMPERATURE	DIMENSIONS	PITCH RESOLUTION
		Normal	High	Normal	High			
M15	12 kHz to 38 kHz	70 ft (21.3 m)	-	80 hrs	-	221° F (105° C)	15 x 1.25 in (381 x 32 mm)	0.1%
M15+	1.9 kHz to 46 kHz	95 ft (28.9 m)	130 ft (39.6 m)	60 hrs	30 hrs	221° F (105° C)	15 x 1.25 in (381 x 32 mm)	0.1%

M17 SERIES

MODEL ID	FREQUENCY	DEPTH RANGE		BATTERY LIFE		MAXIMUM TEMPERATURE	DIMENSIONS	PITCH RESOLUTION
		Normal	High	Normal	High			
M17	12 kHz to 38 kHz	70 ft (21.3 m)	-	80 hrs	-	221° F (105° C)	17.8 x 1.25 in (381 x 32 mm)	0.1%
M17+	1.9 kHz to 46 kHz	95 ft (28.9 m)	130 ft (39.6 m)	60 hrs	30 hrs	221° F (105° C)	17.8 x 1.25 in (381 x 32 mm)	0.1%

Depth Range numbers are obtained with Markman+.

Depth range numbers are based on SAE Standard J2520, and are dependent on battery type, frequency and housing types.

Units are calibrated under low noise conditions. Actual noise conditions may vary which result in depth ranges that are less than specified.



HDD BEACONS

HDD GUIDANCE

Subsite® Electronics offers a complete line of versatile, money-saving HDD Beacons. The new 15T, 17T and 19T beacons are available in one, three or four frequencies and deliver the versatility of three field-configurable power levels plus automatic tuning circuitry that adjusts to match the housing the operator is using. All Subsite HDD beacons are repairable—an industry exclusive—giving you substantial savings over beacon replacement costs.



KEY FEATURES

- ⌘ A Subsite exclusive: Electronic module is replaceable at your Ditch Witch® dealer, so your beacon is jobsite-ready for about half the cost of a new beacon.
- ⌘ Field-configurable power levels help extend battery life.
- ⌘ Automatic tuning circuitry delivers consistent operation in a variety of downhole tools.
- ⌘ Redundant/boosted power supply circuitry eliminates “on-off-on” operation in HDD beacons.
- ⌘ New BlueTooth® module increases connectivity for more reliable communication.
- ⌘ Higher-grade components increase maximum operational temperature from 176°F to 221°F.
- ⌘ Low frequency capability (1.5 kHz) enables you to work around materials like metal rebar.
- ⌘ Stiffer battery springs, constructed with customized material, increase contact area and improve connectivity during harsh vibrations.
- ⌘ New design has a reduced set of connections which makes the beacon more stable and reliable.

HDD GUIDANCE BEACONS SPECIFICATIONS

15T SERIES

Model ID	Frequency	Depth Range			Battery Life (hours) Lithium Thionyl Chloride			Maximum Temperature	Dimensions (Length x Diameter)	Pitch Resolution
		B	H	X	B	H	X			
15T1	29 kHz	70 ft (21.3 m)	—	—	110	—	—	221° F (105° C)	15 x 1.25 in. (381 x 32 mm)	0.1%
15T3	12 kHz	50 ft (15.2 m)	60 ft (18.3 m)	70 ft (21.3 m)	110	90	50	221° F (105° C)	15 x 1.25 in. (381 x 32 mm)	0.1%
	20 kHz	70 ft (21.3 m)	80 ft (24.4 m)	100 ft (30.5 m)	110	90	50			
	29 kHz	70 ft (21.3 m)	80 ft (24.4 m)	100 ft (30.5 m)	110	90	50			
TXU	12 kHz	—	60 ft (18.3 m)	—	—	60	—	176° F (80° C)	15 x 1.25 in. (381 x 32 mm)	0.1%
	29 kHz	—	65 ft (19.8 m)	—	—	60	—			

17T SERIES

17T1	29 kHz	80 ft (24.4 m)	—	—	130	—	—	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
17T1H	29 kHz	—	95 ft (28.9 m)	—	—	90	—	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
17T4	1.5 kHz	15 ft (4.7 m)	35 ft (10.7 m)	40 ft (12.2 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
	12 kHz	60 ft (18.3 m)	70 ft (21.3 m)	80 ft (24.4 m)	130	90	50			
	20 kHz	75 ft (22.9 m)	85 ft (25.9 m)	100 ft (30.5 m)	130	90	50			
	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50			
17T4G	1.5 kHz	15 ft (4.7 m)	35 ft (10.7 m)	40 ft (12.2 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	0.1%
	12 kHz	60 ft (18.3 m)	70 ft (21.3 m)	80 ft (24.4 m)	130	90	50			
	20 kHz	75 ft (22.9 m)	85 ft (25.9 m)	100 ft (30.5 m)	130	90	50			
	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50			

19T SERIES

19T3	12 kHz	55 ft (16.8 m)	75 ft (22.9 m)	95 ft (28.9 m)	130	90	30	221° F (105° C)	19 x 1.25 in. (483 x 32 mm)	0.1%
	20 kHz	80 ft (24.4 m)	95 ft (28.9 m)	120 ft (36.6 m)	130	100	55			
	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	120 ft (36.6 m)	130	100	60			

86Bv3 SERIES

86Bv3	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
86BDv3	12 kHz	60 ft (18.3 m)	70 ft (21.3 m)	80 ft (24.4 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50			
86BGv3	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	0.1%
86BGDv3	12 kHz	60 ft (18.3 m)	70 ft (21.3 m)	80 ft (24.4 m)	130	90	50	221° F (105° C)	17.8 x 1.5 in. (452 x 38 mm)	0.1%
	29 kHz	80 ft (24.4 m)	95 ft (28.9 m)	110 ft (33.5 m)	130	90	50			

850B SERIES

850B	11.2 kHz	50 ft (15.24 m)	60 ft (18.3 m)	70 ft (21.3 m)	90	60	75	176° F (80° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
85BD	1.75 kHz	30 ft (9.14 m)	40 ft (12.2 m)	50 ft (15.24 m)	90	60	75	176° F (80° C)	17.8 x 1.5 in. (452 x 38 mm)	1.0%
	11.2 kHz	50 ft (15.24 m)	60 ft (18.3 m)	70 ft (21.3 m)	90	60	75			
850BG	11.2 kHz	50 ft (15.24 m)	70 ft (21.3 m)	80 ft (24.4 m)	90	60	75	176° F (80° C)	17.8 x 1.5 in. (452 x 38 mm)	0.1%
850GD	1.75 kHz	30 ft (9.14 m)	40 ft (12.2 m)	50 ft (15.24 m)	90	60	75	176° F (80° C)	17.8 x 1.5 in. (452 x 38 mm)	0.1%
	11.2 kHz	50 ft (15.24 m)	70 ft (21.3 m)	80 ft (24.4 m)	90	60	75			

86BHL & 88B SERIES

Model ID	Frequency	Depth Range			Battery Life (hours) Alkaline			Maximum Temperature	Dimensions (Length x Diameter)	Pitch Resolution
		B	H	X	B	H	X			
88B	29 kHz	30 ft (9.14 m)	—	—	20	—	—	176° F (80° C)	11.5 x 0.9 in. (292 x 22 mm)	1.0%
88BAT	29 kHz	30 ft (9.14 m)	—	—	20	—	—	176° F (80° C)	11.5 x 0.9 in. (292 x 22 mm)	1.0%
86BHL	29 kHz	—	70 ft (21.3 m)	—	—	70	—	176° F (80° C)	26.5 x 2.1 in. (673 x 54 mm)	1.0%

The Depth Range numbers are obtained with TKQ/TK RECON4. Depth Range with TK will be approximately 35% less. 850B depth numbers are obtained with 8500TK.

Units are calibrated under low noise conditions. Actual noise conditions may vary which result in depth ranges that are less than specified.

Unless specified differently, battery life hours were obtained when using a Lithium Thionyl Chloride battery. When using alkaline power stick batteries, expect the battery hours to be approximately one-third of the specification above.