

# SF3183 beacon

SF3183 beacon is installed on the tested carrier for underwater positioning. It provides a sound source for underwater acoustic positioning system. The SF3183 beacon uses the acoustic trigger working mode, that is, the hydroacoustic positioning system emits the interrogation signal, the beacon detects the interrogation signal and responds, and the hydroacoustic positioning system locates by detecting the response signal and works out the position of the beacon to locate the carrier under test. High frequency deck can match BCN3183-w beacon and achieve locating function through query response mode. It can connect external PC through RS232 interface to setup the deck unit working specification and querying group indication.

Main function:

- Checking the querying signal and response to programming signal
- Equipped with low power consumption mode
- Supporting wireless address programming function
- Max programming address support: 3609
- Compatible with Sonardyne Ranger2 ultra positioning system and TZ/OBC long baseline positioning system(Sonardyne 7815 beacon protocol)

## 1. Beacon specification:

Sr. No.	Model	Specification
1	Dimensions (Diameter* Length)	62mm*430mm(O.D* Length)
2	Weight	1.1 ± 0.1kg
3	Max Operating depth	500m
4	Structural Material	Plastic/Aluminum alloy
5	Working Frequency	35kHz~50kHz
6	Sound source Level	182dB ( ref.1uPa@1m )
7	Receiving Sensitivity	105dB ( ref.1uPa@1m )
8	Max working range	1000m
9	Working time	Max stand-by time: 700 days Max launching time: 1,000,000 times
10	Battery	Lithium battery pack
11	Query address	1~401 programmable ( Wireless programming )
12	Response frequency	1~9 programmable ( Wireless programming )
13	Wireless frequency	433MHz
14	Working temperature	-5°C~45°C
15	Minimum working depth	0.1m
16	Ranging Accuracy	≤ 1m

## 2. High frequency deck unit

Sr. No.	Model	Specification
1	Working Frequency	35kHz~50kHz
2	Operating Range	1000m
3	Chargeable battery duration	72 hours ( Detail depends on using condition )
4	Battery type	24V chargeable lithium battery OR external power
5	Power Supply	24V ( DC )
6	Standby power consumption	2.3 W
7	Launch period	≥ 2 Seconds
8	PC interface	RS232
9	Cable length of transducer	20 m (standard, customizable)
10	Locating function	Optional
11	GPS input interface	RS232, Optional
12	dimension ( L*W*H mm )	406*330*174
13	Weight (Kg)	1.0
14	Waterproof Level	IP67
15	Power adaptor	220V ( AC ) to 24V ( DC )

