

# Chapter 7 Specifications

## 7.1 NDH-338 Fixed Protective Capsule Unit

### Performance

a) Interface	
1) Standard	IEEE802.3 (10Base-T/ 100Base-TX)
2) Protocol	TCP/IP
b) Recording duration and capacity	
1) Duration	48 hours
2) Capacity	32GB
c) Data recording interval	
1) Sensor data	depends on the input from the sensors (usually 1 second)
2) Audio data	continuous (1 audio file / minute)
3) Image data	15 seconds per each image (X-Band Radar, S-Band Radar, Main-ECDIS and Sub-ECDIS)
d) Acoustic underwater beacon	
1) Operating frequency	37.5kHz ±1kHz
2) Operating time	min. 90 days after being immersed in the water
3) Detectable range	1,800m to 3,600m (depending on surrounding environment, e.g. sea state, nearby boats, marine animals and other factor)
4) Battery life expectancy	3-years after manufacturing. Please note that lifetime may be shorter depending on environmental condition.
5) Battery specifications	Lithium battery (Li-SOCl <sub>2</sub> ) DC +3.6V 8.5Ah
e) Compass safety distance	
1) Standard	0.45m
2) Steering	0.45m

**Environmental condition**

**The recording data in the final recording medium shall be held without loss under below the condition.**

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a) Shock	A half sine-wave pulse of 50 G, with a duration of 11msec
b) Penetration	A mass of 250 kg with a pin of 100mm diameter, dropped from 3m
c) Fire	10 hours with 260°C fire 1 hour with 1100°C fire
d) Deep-sea pressure and immersion	Immersion in sea water at pressure of 60 MPa (equivalent to a depth of 6000m)

**Environmental condition**

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a) Operating temperature	-25 °C to +55 °C (IEC 60945 exposed type)
b) Storage temperature	-55 °C to +70 °C (IEC 60945 exposed type)
c) Vibration	2Hz to 13.2Hz ±1.0mm 13.2Hz to 100Hz 0.7G

**General specification**

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a) Input voltage range	DC +19.5 to +36.5V
b) Power consumption	5W
c) Size	185(w) x 252(d) x 275(h) mm
d) Mass	6.8kg
e) Color	ORANGE

## 7.2 NDH-339 Float Free Capsule Unit

### Performance

a) Interface	
1) Standard	IEEE802.3 (10Base-T/ 100Base-TX)
2) Protocol	TCP/IP
b) Recording duration and capacity	
1) Duration	48 hours
2) Capacity	64GB
c) Data Recording Interval	
1) Sensor data	depends on the input from the sensors (usually 1 second)
2) Audio data	continuous (1 audio file / minute)
3) Image data	15 seconds per each image (X-Band Radar, S-Band Radar, Main-ECDIS and Sub-ECDIS)
d) Locator Light	Flashing LED
e) Transmitter operation	
1) Operating time	168 hours
2) Battery life expectancy	4-years or 5-years after mounting (follow the Classification Society)
3) Battery specifications	Lithium battery DC +7.2V 18Ah
f) 406MHz Transmitter	
1) Frequency	406.037MHz
2) Output power	5W ± 2dB
g) 121.5MHz Transmitter	
1) Frequency	121.5MHz
2) Output power	Under 100mW
h) Hydrostatic Release Mechanism	
1) Operating depth	2 to 4m
2) Life expectancy	2-years after mounting.
i) Compass safety distance	
1) Standard	0.8m
2) Steering	0.8m

**Environmental condition**

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- a) Degree of protection 10m depth at 5minutes
- b) Operating temperature -20 °C to +55 °C (IEC61097-2 satellite EPIRB)
- c) Storage temperature -30 °C to +70 °C (IEC61097-2 satellite EPIRB)

**General specification**

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- a) Input voltage range Power Over Ethernet (IEEE802.3af)
- b) Power consumption 15W
- c) Size 235.8(w) x 214.2(d) x 528.5(h) mm
- d) Mass 5.2kg (including the EPIRB, bracket and cable).
- e) Color ORANGE.