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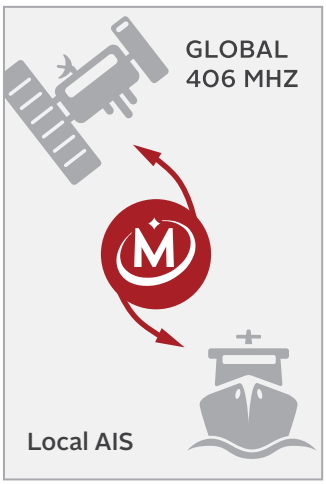
SmartFind G8 EPIRB Range

MEOSAR Compatible® for enhanced detection and location performance, the G8 range includes an industry first; a four-frequency EPIRB, combining the global alerting of 406 MHz with the localised locating and tracking power of AIS.

SmartFind G8 EPIRB Range

The world's most powerful EPIRBs, driving accelerated rescue times via:

- Faster alert detection on the 406 MHz frequency through our MEOSAR compatibility
- The world's first QUADROTECH® EPIRB, with four search and rescue frequencies, the SmartFind G8 AIS supports the Alert, Locate, Tracking and Recovery elements of search and rescue
- Greater location accuracy by receiving GNSS coordinates from a wider range of satellite constellations including Galileo
- World's first convergence of 406 and AIS, combining the global alerting of 406 MHz with the localised locating and tracking power of AIS



McMurdo SmartFind EPIRBs include innovation as standard with ruggedized base, easy service battery, MEOSAR compatibility and compliance with the new United States Coast Guard emergency hands free transport mandate. The additional false activation protection and multiple self-tests also offer total user confidence. Coupled with an unparalleled marine heritage, commitment to quality and a history of innovation, customers know they can trust McMurdo when their lives are at risk.

The G8 AIS is the first EPIRB to have standard 406MHz, 121MHz & GPS capabilities AND include AIS for localised rescue. This combination is a result of new technology but also new attitudes to AIS as a search and rescue tool, plus the realisation that accelerated alert detection and location accuracy will save even more lives. This technology partnership will also help reduce demands on the Search & Rescue authorities as it should help vessel owners detect and resolve accidental activations through visibility of AIS signals.

SmartFind E8/G8 Auto-Housing

A fully protective, spring loaded enclosure, the auto-housing automatically deploys and activates the EPIRB when it is submerged between 1 - 4m. The SmartFind E8/G8 auto-housing incorporates fixing points which ensure previous* McMurdo auto-housing units can be retrofitted with minimum impact, when upgrading your vessels EPIRB.

Each of the 3 models (E8, G8 and G8 AIS) detailed on the comparison table opposite are available as either a category 1 or category 2 EPIRBs:

Category 1 EPIRB models
Supplied inside an auto-housing and automatically deployed and activated when in contact with water (although they can also be manually activated).

Category 2 EPIRB models
Supplied with a unique SmartTransfer bracket to prevent accidental activation, once manually removed from the bracket the EPIRB is activated manually or via water contact.

SmartFind G8 EPIRB Range Features Comparison

Feature	Description	SmartFind E8	SmartFind G8	SmartFind G8 AIS
Optimised for MEOSAR	Enhanced detection capability for accelerated rescue	✓	✓	✓
VHF homer	121.5MHz swept tone	✓	✓	✓
406 frequency	International rescue frequency	✓	✓	✓
GNSS receiver	72 channels multi-constellation (see Note 3)		✓	✓
AIS capability	AIS for localized rescue			✓
SmartTransfer	Manual bracket allowing transport without activating water switch	✓	✓	✓
Auto-housing option	Automatic deployment when submerged 1 - 4m	✓	✓	✓
Activation method	Manual or water activation	✓	✓	✓
SmartCarry	Concealed hands-free easy carry strap		✓	✓
SmartBase	Impact protection	✓	✓	✓
SmartLight	3 lights, 360 degree coverage	✓	✓	✓
SmartSwitch	Reusable ON power button cover, to prevent accidental activation	✓	✓	✓
Battery storage life	10 years (Lithium Iron Disulphide) (see Note 4)	✓	✓	✓
SmartChange	Easy service battery	✓	✓	✓
Global service network	200+ service centres across 80+ countries	✓	✓	✓
Multiple self tests	120 short tests for system check and 20 Long tests which include testing of the GNSS receivers (see Note 1)	✓	✓	✓
Warranty	1 + 4 years with 1 year extension on safety check (see Note 2)	✓	✓	✓
Part of McMurdo Ecosystem	Developed with McMurdo's unique understanding of the technical requirements to fully utilise the Cospas-Sarsat infrastructure	✓	✓	✓

NOTE 1 Recommendation — 1 test a month over a period of 10 years. Long tests twice a year over a 10 year period. Long tests to be conducted in full view of sky. Obstacles will increase time taken for GPS lock, reducing the battery life. Long Tests can also only be performed if GNSS receiver workability seems suspect.

NOTE 2 Warranty is 1 year from date of purchase, an additional 4 years upon registration with McMurdo group. On 5 year health check, an additional year will be put in place.

NOTE 3 GPS and GLONASS has been approved. Galileo will be in place once active in early 2017.

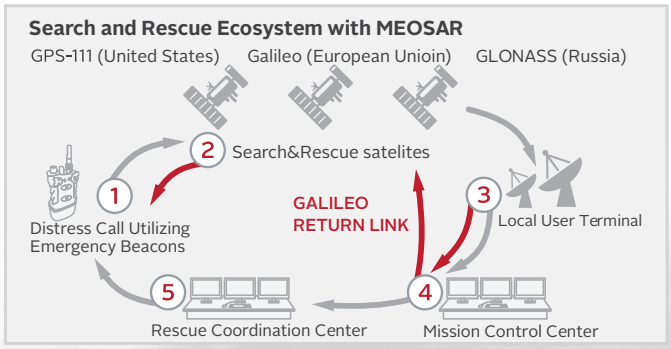
NOTE 4 As a responsible manufacturer, McMurdo recommends a 5 year health check. Shore-based maintenance mandated vessels, battery health check or replacements should be carried out in accordance with flag Administration requirements and not exceeding 5 years

Understanding the MEOSAR Ecosystem

MEOSAR Improvements Better Accuracy, Timeliness and Reliability

In the next few years Cospas Sarsat will be rolling out a new search and rescue infrastructure known as MEOSAR. When fully deployed the aim is: Determine beacon location within 5km, 95% of the time, within 10 minutes.

- 72 MEOSAR satellites positioned at Medium Earth Orbit altitude
- Near instantaneous beacon signal detection using bent pipe technology — average 46 minutes faster compared to LEOSAR
- Reduced response times with multiple signal bursts to improve speed and accuracy of location calculation
- Close to 100% reliability due to multiple antenna systems and MEOLUT networking
- When fully operational next generation beacons will also have a return link signal through Galileo satellites
  - Acknowledge signal receipt
  - Control beacon — remotely activate, turn off or confirm false alarm
- Lives are already being saving with the early operational MEOSAR through faster alerts and greater accuracy, for example in Australia where McMurdo has just finished MEOSAR ground infrastructure installation.



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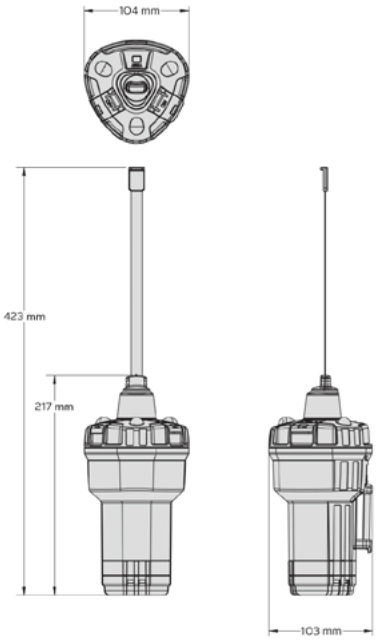
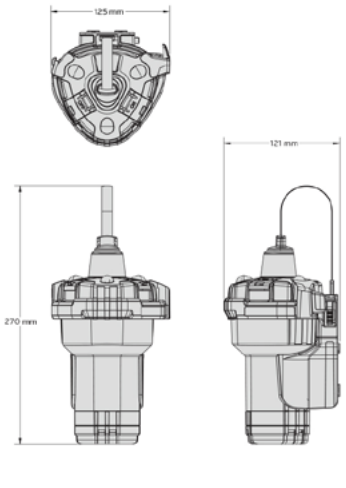
406 MHZ TRANSMITTER	
Frequency	406.040 MHz + 1kHZ
Power output	5 W nominal
Modulation	Phase (16KOG1D)
121.5 MHZ TRANSMITTER	
Frequency	121.5 MHz + 3 kHz
Power output	100 mW nominal
Modulation	Swept tone AM (3K20A3X)
AIS TRANSMITTER (SEE NOTE 1)	
Frequencies	161.975 MHz (AIS1); 162.025 MHz (AIS2)
Power output	1 W nominal
Modulation	Phase (16KOGXW)
GNSS RECEIVER (SEE NOTE 2)	
Constellations	GPS, GLONASS, Galileo
Frequencies	1575.42 MHz (GPS, Galileo); 1602.00 MHz (GLONASS)
Sensitivity	-167 dBm minimum
Satellites tracked	72 channel
STROBE LIGHT	
Type	3 high intensivity LEDs
Light output	0.2 cd minimum
Flash rate	23 flashes per minute
BATTERY	
Type	Lithium iron disulphide
Operating life	48 hours minimum
Shelf life (in-service life)	10 years typical in service (see Note3)
ENVIRONMENT	
Operating temperature	-20 °C to +55 °C (-4° F to +131° F)
Storage temperature	-30 °C to +70 °C (-22° F to +158° F)
Automatic release depth	4 m maximum

DIMENSIONS (EPIRB)	
Weight	710 g
Height/Width/Depth	423x104x103 mm (incl. antenna)
Length of antenna	206 mm
DIMENSIONS (MANUAL BRACKET)	
Weight	110 g
Height/Width/Depth	270x125x121 mm
DIMENSIONS (FLOAT FREE ENCLOSURE)	
Weight	1075 g
Height/Width/Depth	416x126x132 mm
STANDARTS APPLIED (SEE NOTE 4)	
COSPAS-SARSAT	C/S 1.001 C/S T.007
Europe	MED (wheelmark)
USA	USCG & FCC; FCC ID; TBA; 4 7 CFR Parts 80, 2;
International standardsl	Dependant on variant IEC 61097-2; IEC 60945 incl. Corrigendum1; Industry Canada RSS-287; AS/NZS 4280.1; IMO MSC/ Circ. 862
MO regulations	A.662(16); A.694(17); A.810(19); A.814(19)
PART NUMBERS	
SmartFind E8 Manual EPIRB	23-001-004A
SmartFind E8 Auto EPIRB	23-001-504A
SmartFind G8 Manual EPIRB	23-001-002A
SmartFind G8 Auto EPIRB	23-001-502A
SmartFind G8 AIS Manual EPIRB	23-001-001A
SmartFind E8 AIS Auto EPIRB	23-001-501A

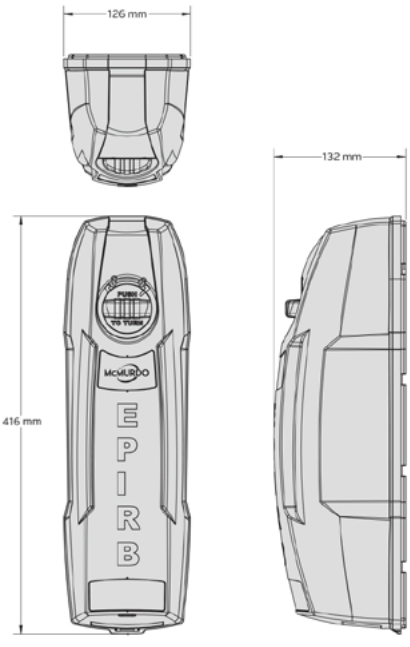
NOTE 1: AIS is available on the G8-AIS model only
NOTE 1: GNSS is available on the G8 and G8-AIS models only
NOTE 1: As a responsible manufacturer, McMurdo recommends a 5-year health check at the nearest McMurdo approved service agent. Shore-based maintenance mandated vessels, battery health check or replacements should be carried out in accordance with flag Administration requirements and not exceeding 5 years.
NOTE 1: Approvals for the various standards is pending



SmartFind G8 EPIRB Range



SmartFind G8 EPIRB Range
Bracket Assembly



SmartFind G8 EPIRB Range
Autohousing Assembly

For service and support, please contact your local distributor or service agent by visiting www.mcmurdomarine.com/find-a-service-centre or email sales-om@orolia.com

www.orolia.com

www.mcmurdogroup.com