



KONGSBERG

Mini SSBL Transponders

MST 319, MST 324 and MST 342

General description

The **Kongsberg Simrad Mini SSBL transponders** are a new design of medium frequency mini-transponders. The MST transponders are to be used with the Kongsberg Simrad underwater positioning and navigation systems; the HiPAP system and the HPR series.

It is to be used for applications where a small and lightweight unit is required.

A MST transponder is similar in size to the original RPT transponder, and it is available with a moulded protective plastic coating. Uncoated units are available as an option.

- All switches and connectors are recessed within the end cap for added protection.
- The transponder comes with a pigtail with connector.

The new mini-transponder has all the features of the original Kongsberg Simrad RPT Transponder.

Features

- External channel selection
- Channels for use with the:
 - HiPAP system and the HPR 400 series
 - HPR 300
- Operator selectable source level to optimise battery life requirements
- Operator selectable sensitivity
- Fast battery charging
- Both transponder and responder function
- Expendability for the future addition of various sensors is built-in

The new design makes extensive use of surface mount technology. This allows all of the hardware to be confined to two board, thus increasing reliability and reducing spare part holding requirements.



Models available

MST 319/N

Model with $\pm 90^\circ$ beam pattern and rechargeable battery pack. Transponder and Responder operation. 1000 meters depth rating.

MST 324/N

Model with $\pm 45^\circ$ beam pattern and rechargeable battery pack. Transponder and Responder operation. 2000 meters depth rating.

MST 342/N

Model with $\pm 20^\circ$ beam pattern and rechargeable battery pack. Transponder and Responder operation. 4000 meters depth rating.

Technical specifications

Maximum depth rating

MST 319	1000 m
MST 324	2000 m
MST 342	4000 m

Source level (rel.1 µPa ref. 1 m)

MST 319	190 dB
MST 324	197 dB
MST 342	203 dB

Source level can be reduced by 3 dB using an internal link.

Receiver sensitivity (rel. 1 µPa).....	100 dB
Sensitivity can be decreased by 10 dB using an internal link.	

Transducer beam

MST 319	±90°
MST 324	±45°
MST 342	±20°

Housing material / coating

Hard anodised aluminium / Polyurethane.

Weight in air / water

MST 319	2.4 kg / 1 kg
MST 324	2.7 kg / 1.2 kg
MST 342	4.1 kg / 2.0 kg

External diameter

MST 319	76 mm
MST 324	76 mm
MST 342	approx. 82 mm

Overall length

MST 319	348 mm
MST 324	358 mm
MST 342	349 mm

MF channels (30 kHz band)

HiPAP / HPR 400	56 channels
HPR 300.....	14 channels

Power supply options

Internal rechargeable battery.....	NiMH
External.....	24 Vdc nominal (22-26 Vdc)

Battery

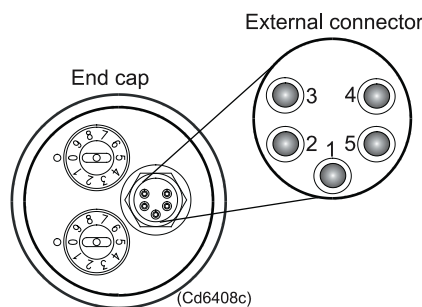
Rechargeable battery NiMH.

Battery lifetime:

Quiescent (same for all MST models)	35 days
---	---------

Number of replies (1 ping per sec):

MST 319	64 800
MST 324	64 800
MST 342	32 400



Pin no.	Function
1	Ext. trigger/ charger LED 1
2	Ground
3	Charger power
4	Ext. power/ charger LED 2
5	On/Off

Connectors

Transponder connector type:

- Subcom MCBH5M (5 pin)

Pigtail connector type:

- Subcom MCIL5F (5 pin)

Floating collar

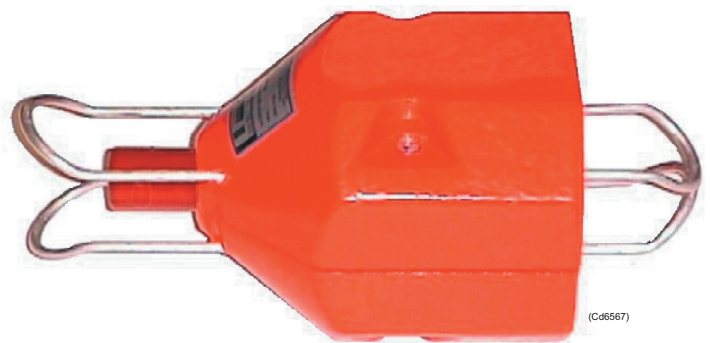
Deep rating..... 2000 m

Weight in air..... approx. 12 kg

Netto buoyancy..... approx 5 kg

Overall height with cage..... 530 mm

Diagonal diameter..... 275 mm



KONGSBERG SIMRAD AS

Strandpromenaden 50 PO.Box 111 N-3191 Horten Norway

Telephone +47 33 02 38 00 Telefax +47 33 04 47 53

www.kongsberg-simrad.com horten.sales@kongsberg-simrad.com



KONGSBERG