

Trimble GPS Receiver

**Attention:**

Trimble 1 and Trimble 2 GPS Receivers are operated by ship's command only.

The sensor is essential device providing position data for a large number of scientific devices. Most sensors do not directly receive positions from GPS sensor but from motion sensor Hydrins.

The system TRIMBLE 1 / HYDRINS 1 and TRIMBLE 2 / HYDRINS 2 are alternatively sending positions to the customers. DShip is logging positions from both GPS receivers in parallel.

Summary

The Trimble R750 is a combined radio and GPS receiver. It uses all currently available satellite signals including L1, L2 and the GPS modernized L2C code.

Trimble 1

Manufacturer	Trimble Navigation Limited
Model	Trimble R750
Serial No.	6236R47098
Type	satellite positioning system
REGISTRY-Link	REGISTRY (11072)



Trimble 2

Manufacturer	Trimble Navigation Limited
Model	Trimble R750
Serial No.	6236R47107
Type	satellite positioning system
REGISTRY-Link	REGISTRY (11073)



Contacts

Name	Institution	Role
Ralf Krocke	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Device Contact

Components

Position

Trimble 1 antenna position

Info	xyz-position of antenna from Alignment Survey Report RV Polarstern (June 2016), located on upper observation deck
X	78.753 m (X-0 is at the center of der rudder (ref. design drawing of the vessel), positive X-axis is forward and along vessel centerline)
Y	-8.635 m (Y-0 at centerline, positive Y-axis is portside)
Z	33.37 m (Z-0 is set to the lowest point of the keel, positive Z-axis is upwards)

Trimble 2 antenna position

Info	xyz-position of antenna from Alignment Survey Report RV Polarstern (June 2016), located on upper observation deck
X	72.503 m (X-0 is at the center of der rudder (ref. design drawing of the vessel), positive X-axis is forward and along vessel centerline)

Y	9.234 m (Y-0 at centerline, positive Y-axis is portside)
Z	33.383 m (Z-0 is set to the lowest point of the keel, positive Z-axis is upwards)

Data logging, storage and archiving

Logged parameters

Parameter	O2ARegistry Output Type	Unit
Latitude	latitude	deg
Longitude	longitude	deg
number of satellites	quality flag	
Time Stamp	time	
Date	date	
Course	attitude	deg
gps quality indicator	quality flag	

Central geographical ship's position and time standard

Rawdata storage on board

Dship

Data archiving on land

Documentation

- [Trimble R750 datasheet \(Factsheet, 641 kB\)](#)