

StellaMarine repeater for ships

About

The Stellamarine is a commercial grade mobile signal amplifier for ships that works for all mobile operators.

It has 4 ports that facilitates 4 indoor antennas allowing you to amplify the mobile signal into 4 separate areas inside your ship. It has a simple 10 LED diagnostic indicator that aides you during and after installation.

It can amplify all EU cellular bands and all networks.



Features:

- Diagnostic indicator - 10 LEDs
- 4 indoor antennas - 4 individual coverage areas.
- Boosts mobile signal 30km from shore.
- Auto adjust gains when entering/leaving port.
- Works with all phones / devices./ all operators.
- Boosts All networks 2G/ 3G/ 4G
- Completely network safe.
- Passed E.T.S.I specification.

Model	Bands	Ports	PSU	Weight	Dims cm
SD-RP1002-LG-O	B20, B8	1	12V,2A	1kg	32X19X3.5
SD-RP1002-LG-O-4	B20, B8	4	12V,2A	1kg	32X19X3.5
SD-RP1002-LGW-O	B20, B8, B1	1	12V,2.2A	1.2kg	40X19X3.5
SD-RP1002-LGW-O-4	B20, B8, B1	4	12V,2.2A	1.2kg	40X19X3.5
SD-RP1002-GDW-O	B8, B3, B1	1	12V,2.2A	1.2kg	40X19X3.5
SD-RP1002-GDW-O-4	B8, B3, B1	4	12V,2.2A	1.2kg	40X19X3.5
SD-RP1002-LGDWH-O	B20, B8, B3, B1, B7	1	12V,5A	2kg	43X30X3.8
SD-RP1002-LGDWH-O-4	B20, B8, B3, B1, B7	4	12V,5A	2kg	43X30X3.8

Standard 4 port kit includes:



StellaMarine



¹Internal antennas X4



External antenna



²Internal cables SD400



External cable SD400

¹Your model may have 1 port or 4 ports, 1 or 4 internal antennas.

²Custom antenna types and cables lengths supplied.

EU Bands	B20	B8	B3	B1	B7
Downlink	791-821	925-960	1805-1880	2110-2170	2620-2690
Uplink	832-862	880-915	1710-1785	1920-1980	2500-2570

Amplifier Specs

Coverage	(1000m ² per antenna X 4) = ~10 rooms
Gain	Uplink Gp: 60dB Downlink Gp> 60dB
Pass band ripple	<4dB
I/O impedance	50 ohm/SMA female connector
Max up/down signal strength	20dBm / 10dBm
Ambient Temperature	-30°C to +70°C
Power supply input	110 - 240V AC
Oscillation Control	Automatic
AGC Level Control:	Automatic ¹
Uplink Switch On	Yes ²
AGC Range	30dB
Surge protection	SMA connectors DC grounded, 12V DC port MOV protected

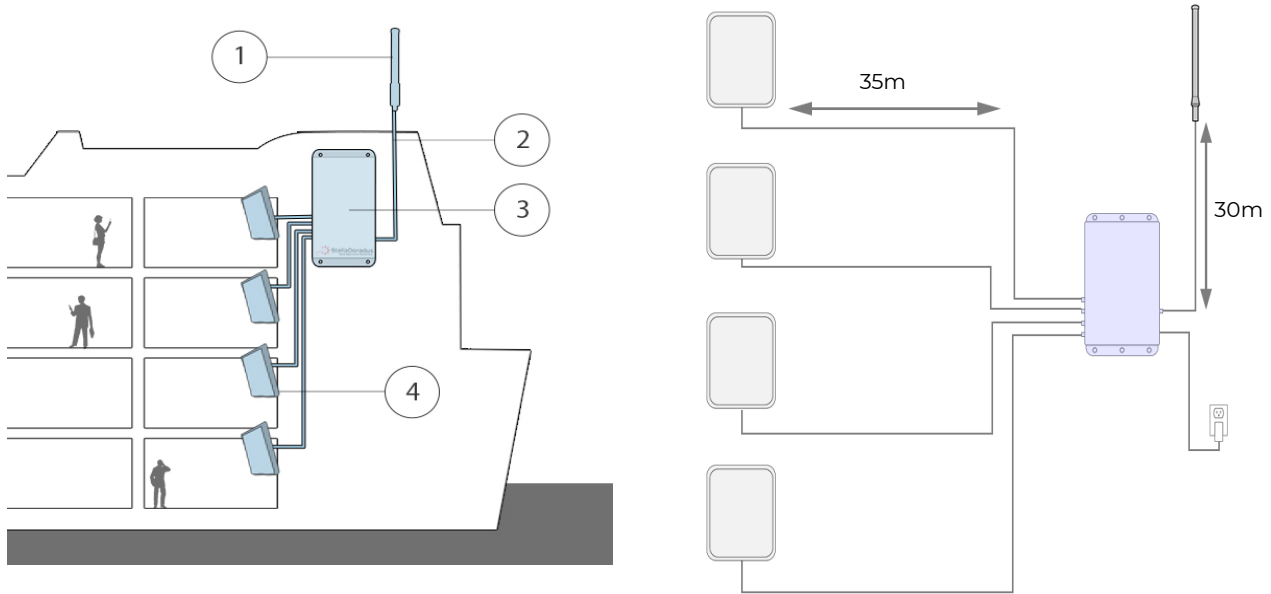
Antennas

	Indoor Panel	Outdoor Yagi
Nominal Gain	6.4dBi / 9.4dBi	10dBi
3dB beam Pattern	60° x 60°	60° x 50°
Bandwidth	700MHz - 2700MHz	700MHz - 2700MHz
VSWR	<1.4	<1.5
Front to Back Ratio	> 20dB	> 20dB
Polarization	Vertical	Vertical
Power Rating	50W	50W
Impedance	50-OHM	50-OHM
Termination	SMA male	N-Female
Cross Pol. Discrimination	-20dB	-20dB
Dimensions	210 x 180 x 43mm	442 x 205 x 62mm
Weight	0.68kg	1.2kg
Wind velocity	126km/hr	140km/hr
Working temperature	-40°C to +65°C	-40°C to +65°C

¹Automatically adjusts during installation. Thereafter, automatically adjusts for seasonal variation in pathloss between the base station and the outdoor antenna.

²The uplink amplifiers switch off when the repeater is not in use. This reduces the uplink noise to almost zero. When the repeater is in use (phone call or data session), the uplink amplifiers switch on for the duration of the call/ data session only.

Install diagram



1. Outdoor Omni antenna.
2. Coaxial SD400 cable (20-30m).
3. StellaMarine repeater.
4. Internal Panel/Omni antennas

Modular system

For larger ships, you can extend your system with line-amplifiers.

In the example below, we are using 4 line-amplifiers after the repeater to extend the signal deep into the ship, giving us a total of 16 internal antennas.

This modular system can be extended up to 100 line-amplifiers, offering coverage for even the largest mega ship.

