STELLA DORADUS

DASMARINE

An industrial grade cellular amplifier system for ships.
Distributes mobile signal throughout the ship.

STELLA
DORADUS

The DASMarine is an industrial grade cellular amplifier system for ships. It works with all mobile operators in the EMEA or America regions. It ensures that the ship is connected to the mobile signal up to 30km from the coastline.

This solution is scalable and modular and is suitable for any sized ship, including large, super yachts.

It efficiently distributes mobile signal, voice and data, throughout the ship, ensuring the crew can communicate at all times.

When connected to the StellaControl platform, it can be remotely managed, monitored and adjusted, as well as receive real-time measurements of signal power, gain, and other metrics for each band.

- Boosts all operators.
- 5G/4G/3G/2G.
- Maintains signal up to 30km off coastline.
- Distributes voice/data signal around ship.
- Remote monitoring.
- Conforms to E.T.S.I specifications.
- Wall-mount/Rack-mount.
- Scalable modular solution.
- Large LCD Touch Display.
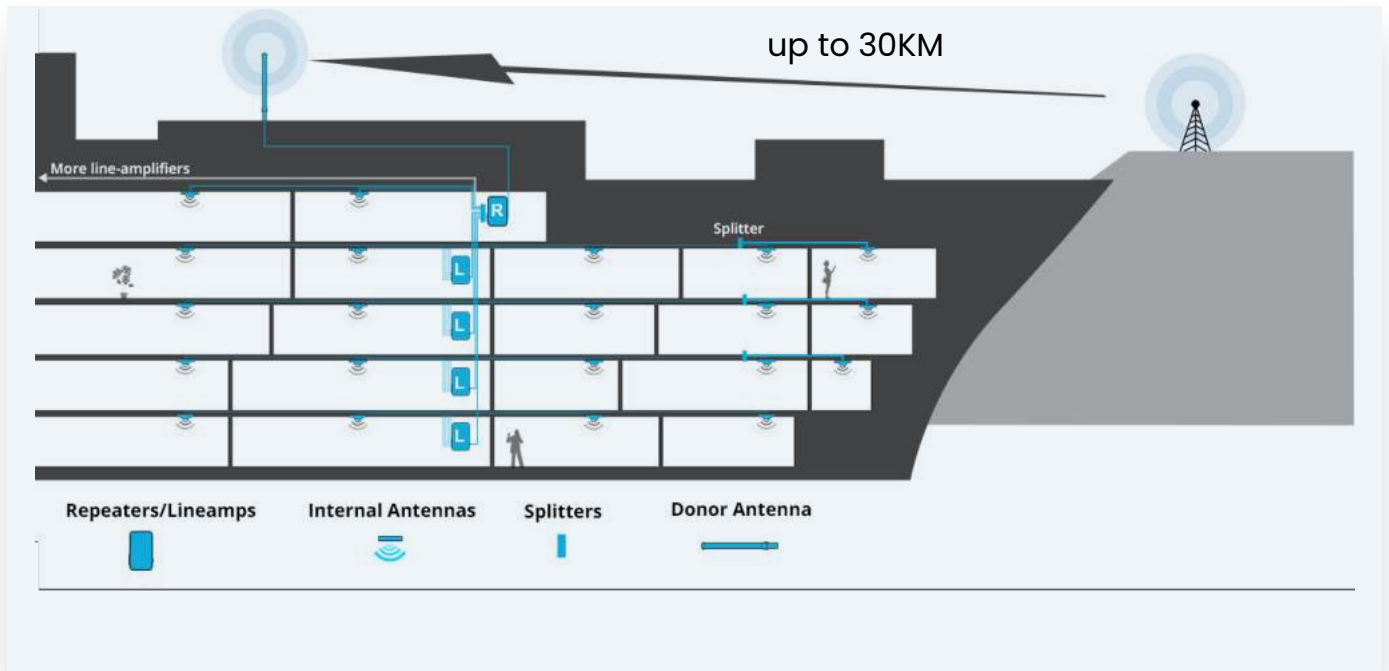- Region: EMEA / Americas.

The DASMarine is a modular and configurable solution consisting of iRepeaters and LineAmps. The LineAmps boost the signal by a further 20dBs allowing the signal to be distributed deep within the ship.

This solution can be configured for either the USA only or EU only.
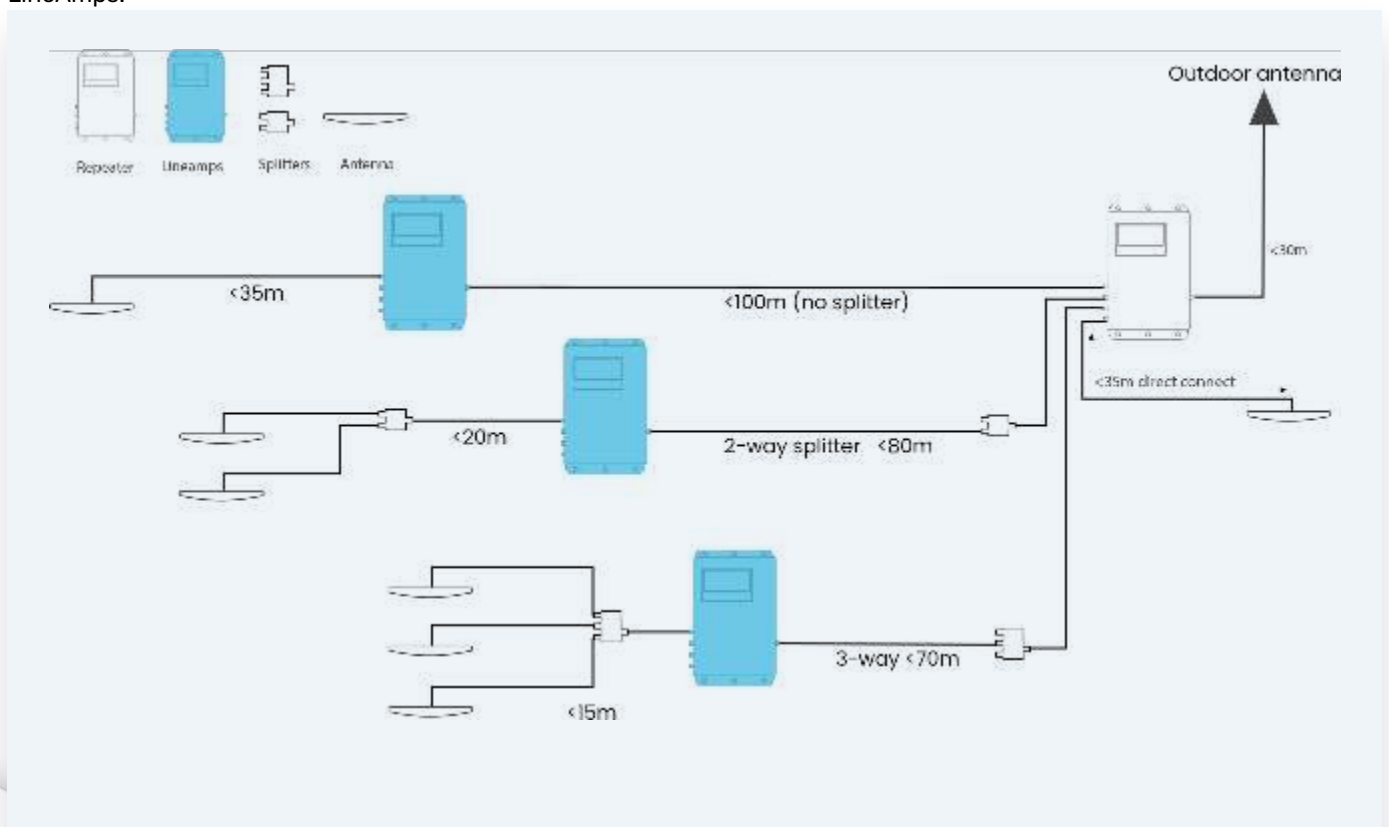
Amp spec	Device	Gain dB	Power up/down	Region
iR6-EU	Repeater	60	20dBm/10dBm	EMEA
iR5-US	Repeater	60	20dBm/10dBm	Americas
iL6-EU	LineAmp	20	0dBm/10dBm	EMEA
iL5-US	LineAmp	20	0dBm/10dBm	Americas

System Diagram

up to 30KM

More line-amplifiers

Splitter

Repeaters/Lineamps **Internal Antennas** **Splitters** **Donor Antenna**

Modular and Scalable system

The example system above shows one iRepeater and four LineAmps. The number of LineAmps can be increased by using splitters on each port of the repeater. The number of internal antennas can be increased by using splitters after the LineAmps.
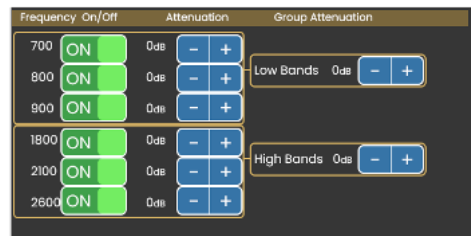

Repeater Lineamps Splitters Antenna

Outdoor antenna

<35m <100m (no splitter) <30m

<20m 2-way splitter <80m <35m direct connect

3-way <70m

<15m

LCD - Full Colour - Touch

Overview

The large LCD panel allows the user to easily see what is happening inside the repeater. Controlling bands and configuring the repeater is easy and intuitive.

Main Page

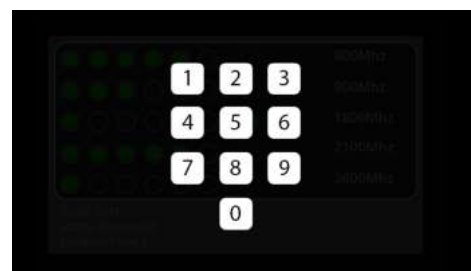Simple overview of power levels and current state of each band.

Control band page

Manually turn OFF/ON or attenuate any band. Full HDR manual attenuators.

Frequency (MHz)	700	800	900	1800	2100	2600
UL Power (dBm)	-15	-15	-15	-15	-15	-15
DL Power (dBm)	-30	-30	-30	12	-30	-30
UL Fast AGC (dB)	0	1	3	5	4	5
AGC (dB)	0	0	0	0	0	0
Manual atten (dB)						
UL Reduced Gain (dB)						
DL Reduced Gain (dB)						
Clamp (dB)	0	0	0	0	0	0
DL Total Loss (dB)						

Decibel (dB) page

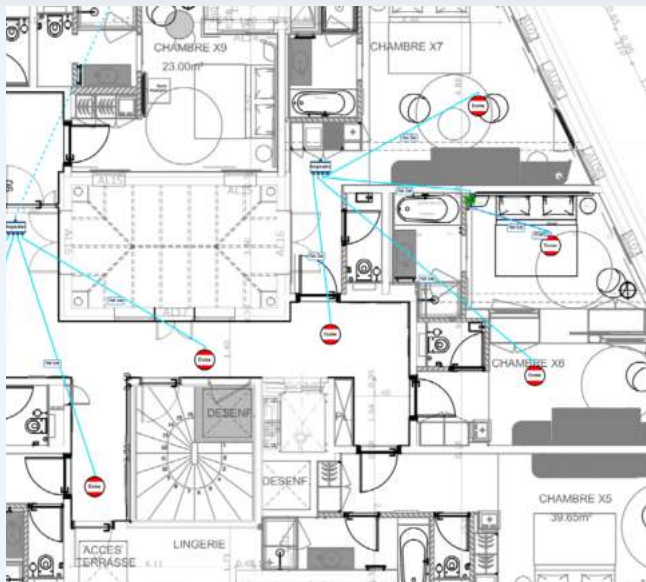Accurate signal measurements in dBs

Security

Secure 6 digit pin to block unauthorized access.

StellaControl Cloud Platform

Inventory page

Manage all iRepeaters easily from the inventory. Sell devices to a growing list of customers. Monitor performance of all iRepeaters via the cloud.

StellaPlanner

Design repeaters systems with the StellaPlanner. Upload building plans, place antennnas in chosen locations. Let the tool calculate signal power and RF losses in the design. All projects can be stored in a personalized account on StellaControl. Let Stella help you design the optimal repeater system.

History Graphs

View many metrics over time, like signal power, alerts, user setting changes plus much more..

Bands	B28	B20	B8	B3	B1	B7	B5	B4	B25
Downlink (MHz)	758-788	791-821	925-960	1805-1880	2110-2170	2620-2690	869-894	2110-2155	1930-1990
Uplink (MHz)	703-733	832-862	880-915	1710-1785	1920-1980	2500-2570	824-849	1700-1755	1850-1915
REGION	EU/US	EU	EU	EU	EU	EU	US	US	US

Regions:

EU: Europe, Middle East, Africa.   **US:** Caribbean, USA, Mexico, South America

Device	Up/Down Power	GAIN
Repeater	20dBm / 10dBm	60dB
LineAmp	0dBm / 10dBm	20dB

Repeater/LineAmp Specification

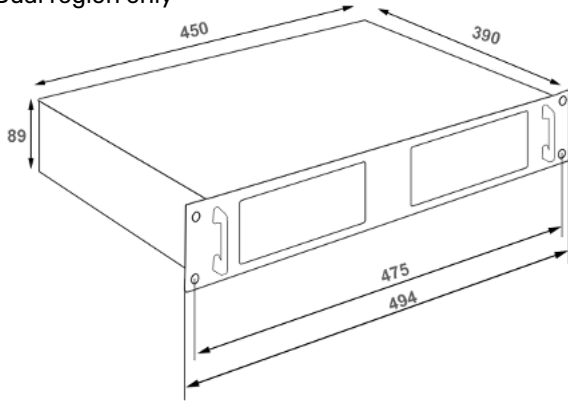|	
Coverage	(1000m^2 per antenna X 4) = ~15 rooms
Pass band ripple	<4dB
I/O impedance	50 ohm/SMA female connector
Ambient Temperature	-30°C to +70°C
Power supply input	110 - 240V AC
Oscillation Control	Automatic
AGC Level Control:	Automatic[1]
Uplink Switch On	Yes[2]
AGC Range	30dB
Surge protection	SMA connectors DC grounded, 12V DC port MOV protected

[1]Automatically adjusts during installation. Thereafter, automatically adjusts for seasonal variation in path-loss between the base station and the outdoor antenna.

[2]The 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.
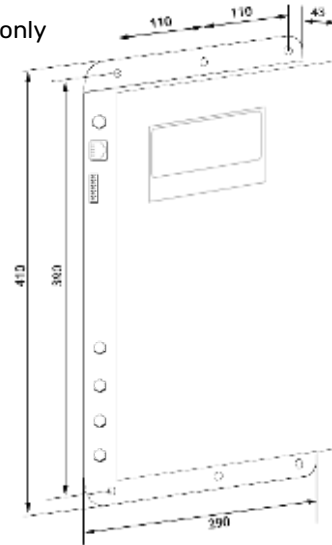
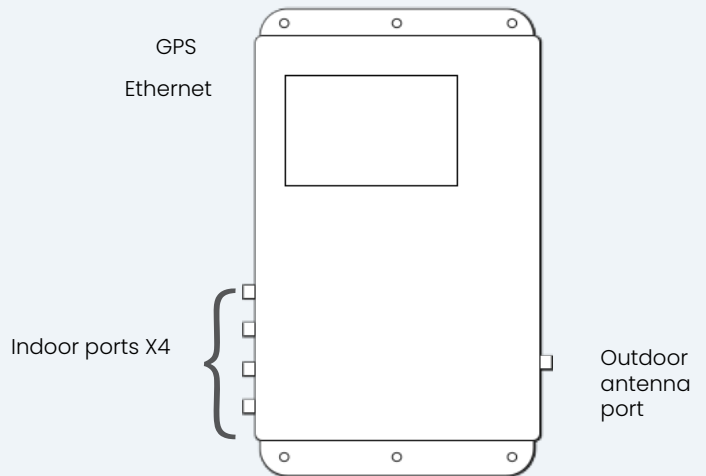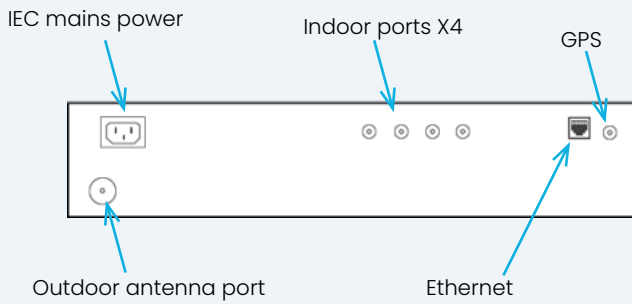Note: Specifications subject to change without notice.

Dimensions:

Wallmount
Single region only

Rackmount
Dual region only

Diagrams

IEC mains power

Indoor ports X4

GPS

Outdoor antenna port

Ethernet

GPS
Ethernet

Indoor ports X4

Outdoor antenna port

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