



STELLA DORADUS

# DASMARINE

An industrial grade cellular amplifier system for ships that works for all mobile operators in the EMEA region



**The DASMarine is an industrial grade cellular amplifier system for ships that works for all mobile operators in the EMEA region. It keeps the ship connected to mobile signal up to 30km from the coastline.**

This solution is scalable and modular, 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 Stella cloud platform, it can be remotely managed, monitored and adjusted, as well as receive real-time measurements of signal power, gain, plus other metrics for each band.

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

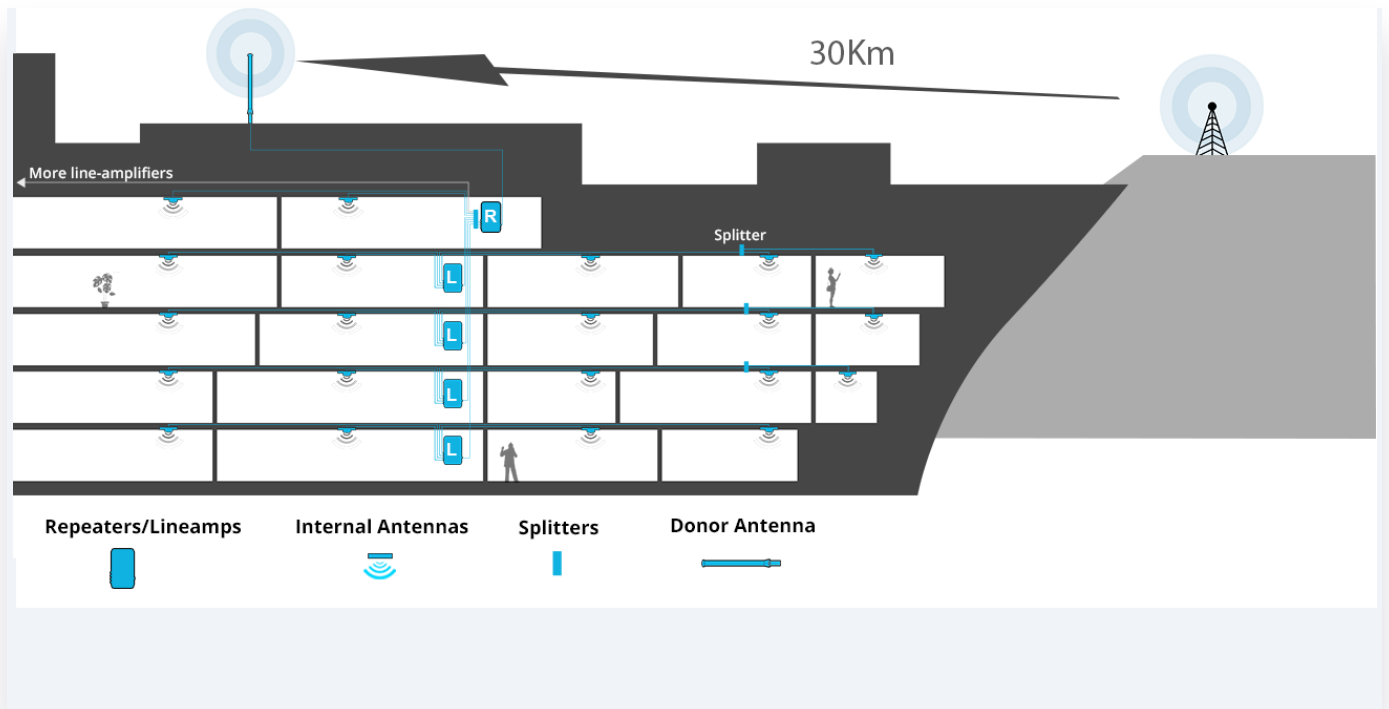


Systems	Integrated Amps	Region	Mounting
DasMarine-EU	iR6-T/iL6-T	EMEA	Wall

## Integrated Products

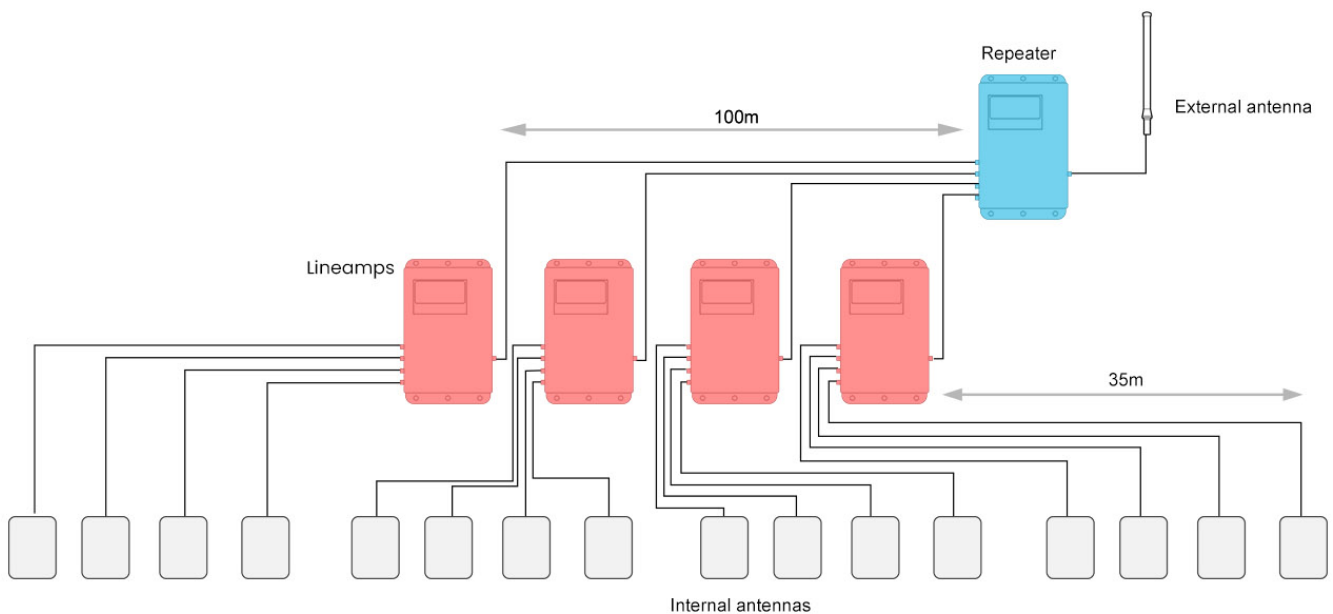
Amps	Gain dB	Power up/down	Region	Mounting
iR6-T	60	20dBm/10dBm	EMEA	Wall
iL6-T	20	0dBm/10dBm	EMEA	Wall

## System Diagram



### Modular/scalable system

In the example system above, there is one Repeater and four LineAmps. We can increase the number of LineAmps by using splitters on the repeater. We can increase the number of internal antennas using splitters after the LineAmps.



Bands	B28	B20	B8	B3	B1	B7
Down-link (MHz)	758-788	791-821	925-960	1805-1880	2110-2170	2620-2690
Up-link (MHz)	703-733	832-862	880-915	1710-1785	1920-1980	2500-2570

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

### Repeater/LineAmp Specs

Coverage	(1000m <sup>2</sup> 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 <sup>1</sup>
Up-link Switch On	Yes <sup>2</sup>
AGC Range	30dB
Surge protection	SMA connectors DC grounded, 12V DC port MOV protected

<sup>1</sup>Automatically adjusts during installation. Thereafter, automatically adjusts for seasonal variation in path-loss between the base station and the outdoor antenna.

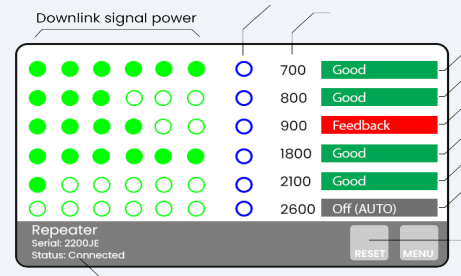
<sup>2</sup>The up-link amplifiers switch off when the repeater is not in use. This reduces the up-link noise to almost zero. When the repeater is in use (phone call or data session), the up-link amplifiers switch on for the duration of the call/ data session only.

Note: Specifications subject to change without notice.

### Main screen:

**Green:** Down-link signal power.

**Blue:** The band is switched on. This will happen when a data session is initiated. Once the data session is over, the band switches off and the blue dot also switches off.



Good	Indicates no problems.
Feedback	Feedback between the indoor and outdoor antennas. These antennas should be separated by a solid block wall.

### Decibel (dB) page:

The dB page shows actual raw data (Db) from the amplifier.

Frequency (MHz)	700	800	900	1800	2100	2600
Power up (dBm)	-15	-15	-15	-15	-15	-15
Power dn (dBm)	-30	-30	-30	12	-30	-30
Phone up (dB)	5	5	5	5	5	5
Temp up/dn (dB)	0	0	0	0	0	0
Clamp (dB)	0	0	0	0	0	0
mgain (dB)			0	0	0	0
Max Osc (dB)	0	0	0	0	0	0
Total Loss dn	0	0	0	3	0	0

Power Up	Up-link power received by the amplifier. (Power emitted by the router)
Power dn	Down-link power from the base station received by the amplifier.
AGC	Up-link and down-link AGC. This controls the up-link and down-link gain at the same time, when the base station down-link signal is too strong.

### Other LCD features

Pin Access	A secret pin can lock out access to the LCD display. The pin is set on the clients account on the platform.
Band On/Off	Turn any band on or off.

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