



STELLA DORADUS

iREPEATER^{UK}

The iRepeater is a commercial grade cellular repeater that amplifies the signal for all mobile operators in buildings.



The iRepeater is a commercial grade cellular amplifier that amplifies the signal for all mobile operators. When connected to the StellaControl platform, the iRepeater can be remotely managed, monitored, and adjusted, as well as receive real-time measurements of signal power, signal gain, and other control metrics for each band.

The 4-way splitter allows the cellular signal to be amplified in 4 separate areas within the building. This increases the coverage area to between 5 and 15 rooms, depending on the size and shape of the room.



Features

- Boosts all operators - works with all phones and devices.
- Boosts 5G/4G/3G/2G.
- 5 to 15 room coverage.
- LCD Touch Display - Enhanced user experience.
- Remote monitoring via StellaControl cloud.
- HDR Software attenuation - no need for external attenuators.
- Feedback detection - accurate detection of oscillations
- Legal and fully compliant to UK standards

| Model | Bands | Ports | PSU | Weight | Dims cm | Region |
|--------|----------------------|-------|--------|--------|-----------|--------|
| iR5-UK | B28, B20, B8, B3, B1 | 1* | 12V,5A | 2.8kg | 43X30X4.8 | UK |
| iR4-UK | B20, B8, B3, B1 | 1* | 12V,5A | 2kg | 27X29X3.8 | UK |

*Kit supplied with 4 way splitter.

Standard kit includes:



Internal antennas



²Internal cables
4x 15m SD240



iRepeater



External 15m
cable SD400



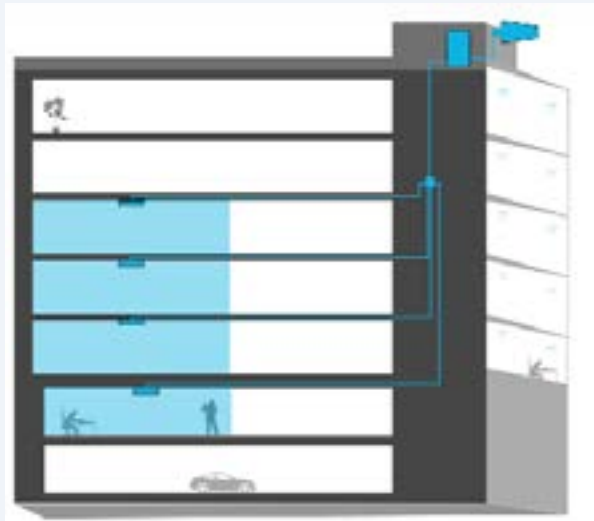
External antenna



4-Way Splitter

²Custom antennas and cable lengths supplied.

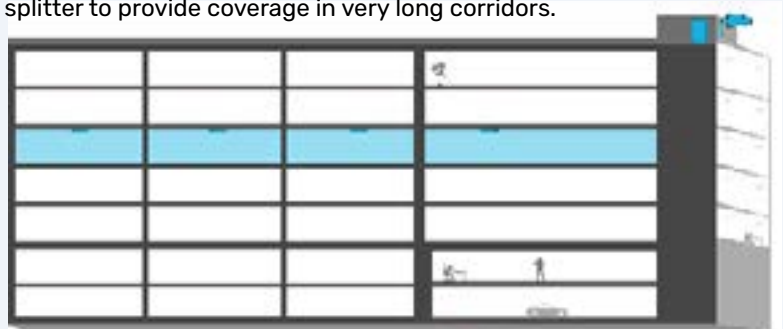
Single iRepeater System



Above: Four separate antennas can be attached to the iRepeater. The distance from the outdoor antenna to the repeater is max 30m and the distance from the repeater to the 4 internal antennas is max 35m.



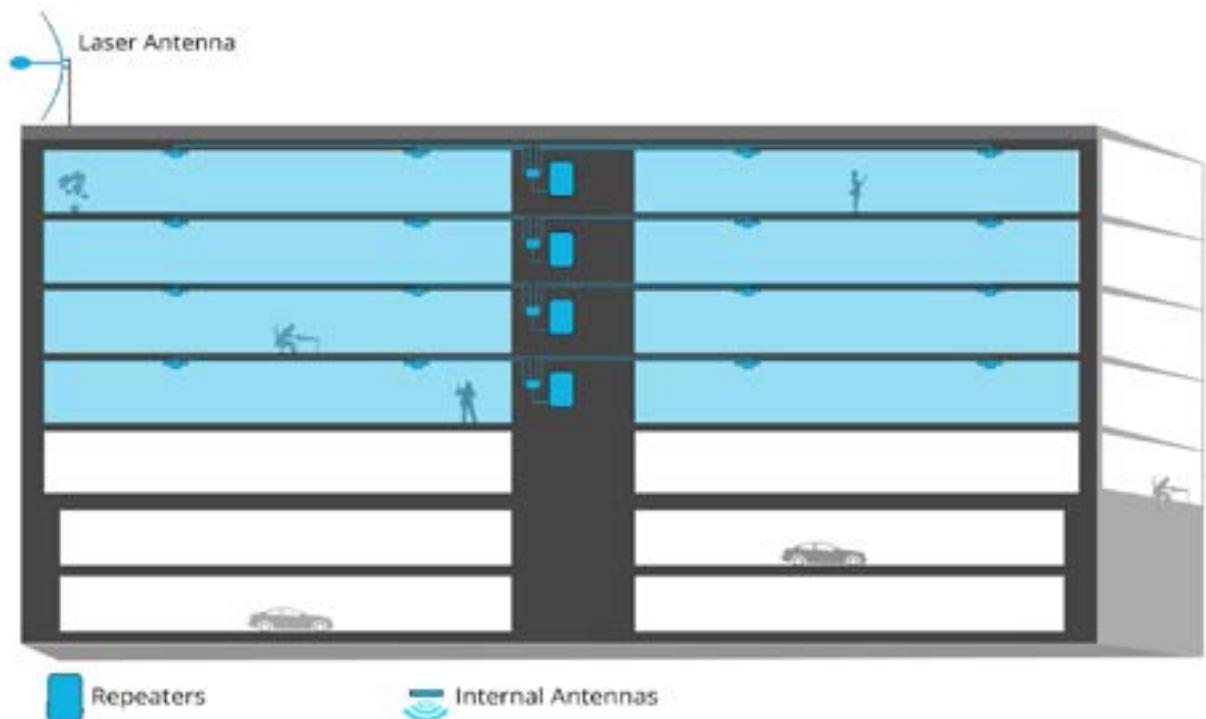
Below: Tappers can be used instead of the 4-way splitter to provide coverage in very long corridors.



iRepeater for larger multi-floor buildings

For larger buildings, the system can be scaled up using more iRepeaters.

In the example below, several iRepeaters can be used to distribute mobile signal throughout the building. The Laser antenna provides high gain for all iRepeaters.



LCD - Full Colour - Touch



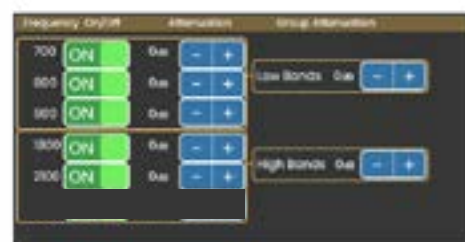
Overview

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 | 2400 |
|----------------------|-----|-----|-----|------|------|------|
| UL Power (dBm) | -13 | -13 | -13 | -13 | -13 | -13 |
| DL Power (dBm) | -30 | -30 | -30 | -12 | -30 | -30 |
| UL Peak ACC (dB) | 0 | 1 | 1 | 1 | 4 | 1 |
| ACC (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

All iRepeaters can be easily managed from the inventory. Devices can be sold to a growing list of customers. The performance of all iRepeaters can be managed via the cloud.

| ID | Type | Status | Model | Price | Stock | Location | Company |
|----|-----------|--------|---------|--------|----------|------------|------------------------------------|
| 40 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. |
| 41 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 42 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 43 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 44 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 45 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 46 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 47 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 48 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 49 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 50 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 51 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 52 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 53 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 54 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |
| 55 | iRepeater | OK | Model A | 112,11 | 99,85,18 | 10/10/2022 | Stella Repeater Co. - 480 Shipping |

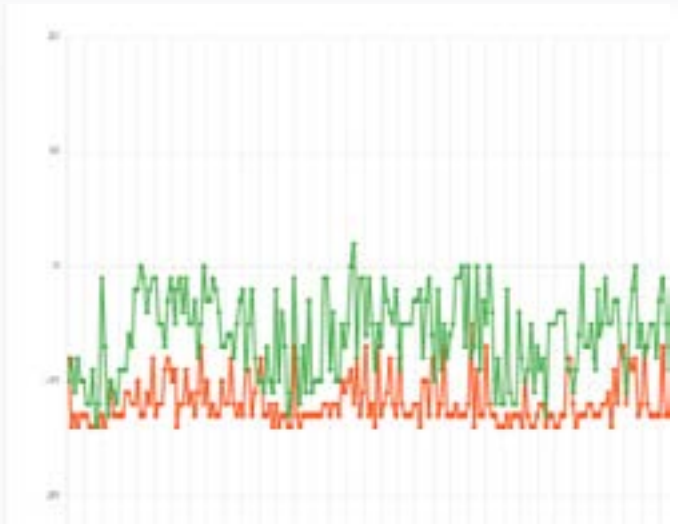
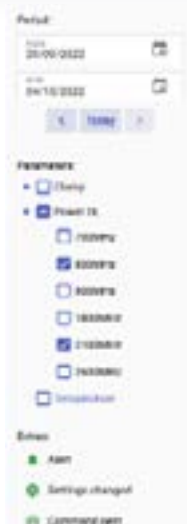


StellaPlanner

Repeaters systems can be designed with the StellaPlanner. Building plans can be uploaded and antennas can be placed in chosen locations. The tool will calculate signal power and RF losses in the design. All projects can be stored in a personalized account on StellaControl. Stella is available to help you design the optimal repeater system.

History Graphs

View metrics from the iRepeater graphed over time to quickly understand the behaviour of the repeater and track any potential issues.



| UK Bands | B28 | B20 | B8 | B3 | B1 |
|----------|---------|---------|---------|-----------|-----------|
| Downlink | 758-788 | 791-821 | 925-960 | 1805-1880 | 2110-2170 |
| Uplink | 703-733 | 832-862 | 880-915 | 1710-1785 | 1920-1980 |

Amplifier Specification

| | | |
|-----------------------------|---|-------------------|
| Coverage | 5-15 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 | |
| Power supply output | 12v DC | |
| 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 | N-Female | 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 path loss between the base station and the outdoor antenna.

²The up-link 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 up-link amplifiers switch on for the duration of the call/ data session only.

Note: Specifications subject to change without notice.



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