



STELLA DORADUS

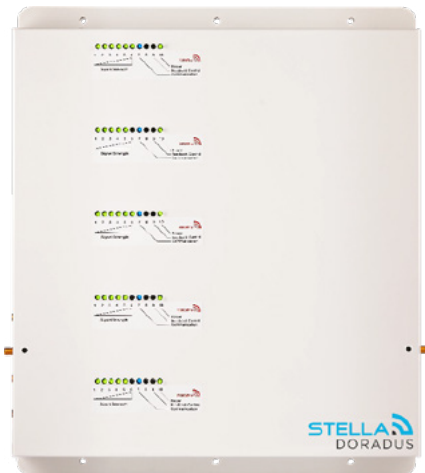
# SOHO Repeater

User Manual



The SOHO repeater amplifies the signal from all mobile operators, enabling clear voice calls in the home, as well as supporting the fastest internet speeds : 5G/4G/3G/2G.

The external antenna is installed on the roof of the building where it receives the best signal from all mobile operators. The repeater amplifies the signal and spreads it around the building via the indoor antenna, providing coverage for up to 5 rooms. This coverage area can be expanded by adding extra internal antennas.



- Coverage: up to 5 rooms.
- Amplifies the signal from all mobile operators
- Clear voice calls and high speed 4G/5G data
- Simple and intuitive LED indicator
- Everything is included for complete installation
- PortSense - Automatically tests cables and connectors
- Bands: 28/20/8/3/1 - 5G/4G/3G/2G
- Compliant with all EU RED regulations.

Model	Bands	Dims	PSU	PortSense	Iterface
R2-SOHO	B20/B8	35X30X4.3cm	12V, 3A	Yes	LED
R3-SOHO	B20/B8/B3	35X30X4.3cm	12V, 3A	No	LED
R4-LCD	B20/B8/B3/B1	35X30X4.3cm	12V, 3A	Yes	LCD
R5-SOHO	B28/B20/B8/B3/B1	35X30X4.3cm	12V, 5A	Yes	LED

### Standard kit includes:



R5 SOHO repeater



External Antenna



Internal Antenna



Power Supply



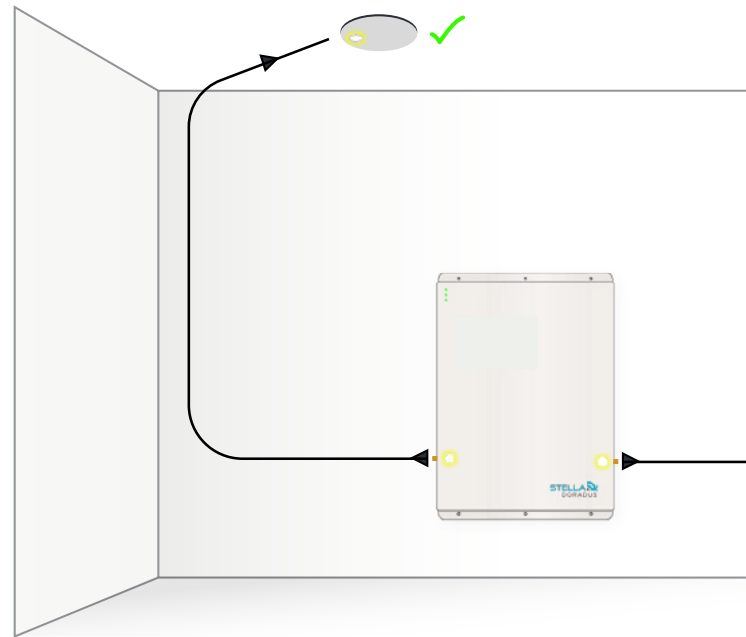
12m External cable SD240

Do not use non Stella equipment with Stella repeaters.

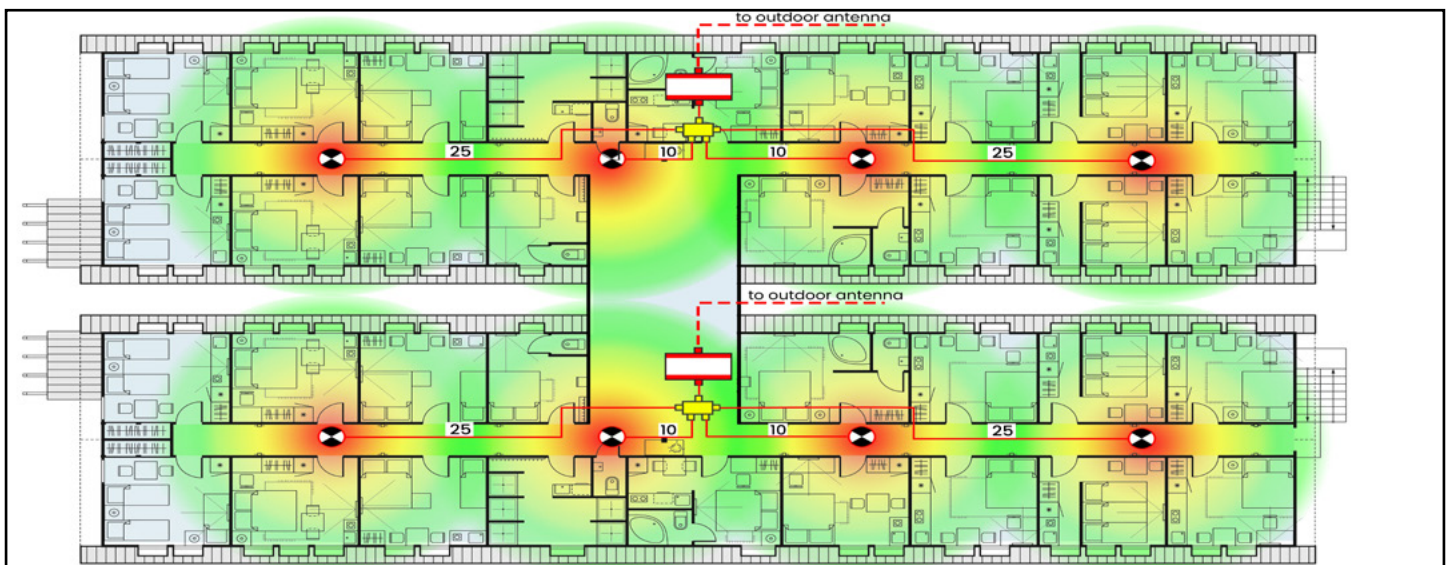
Stella repeaters operate silently on the operators network. Using Stella equipment with other manufacturers equipment will break this control system and could potentially harm the operators network. Doing so will void warranty.

## PortSense

With PortSense, the repeater can detect when an antenna is connected to the indoor and outdoor antenna port. Our new smart antennas have a white LED embedded inside them. There is also a white LED on the port of the repeater. These two white LEDs illuminate when the cables and antennas are correctly attached, giving the installer peace of mind. If the LED does not light up, there could be an issue with the cable and/or connector and therefore they should be checked.



## StellaPlanner



The StellaPlanner is our free online installation design tool which is accessible from the StellaControl platform. Installers can upload their building floor plans, place antennas, repeaters, splitters and cable in the correct location, and fully design the repeater system online before installing any equipment. This helps the installer to more accurately plan the equipment required and therefore potentially reduce the cost of the project.

The StellaPlanner is supported by our Stella engineers, who offer expert design advice and support.

\*Bands: Your repeater may be a subset of these bands. See options above.

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

### Amplifier Specs

Coverage	up to 5 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 <sup>1</sup>
Uplink Switch On	Yes <sup>2</sup>
AGC Range	30dB
Surge protection	SMA connectors DC grounded, 12V DC port MOV protected
PortSense	Yes

### 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

<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 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.



WWW.STELLADORADUS.COM



info@stelladoradus.com  
+353 51 387145



Stella Doradus Europe Ltd,  
Coolfin, Portlaw, Co. Waterford,  
X91NH59 Ireland



WhatsApp Helpline  
00 353 85 854 1516