

STELLA DORADUS

Classic REPEATER MANUAL



The Classic repeater amplifies the signal from the 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 the mobile operators. The signal is amplified by the repeater and passed around the inside of the building, covering up to 5 rooms. This coverage area can be expanded by adding extra internal antennas.



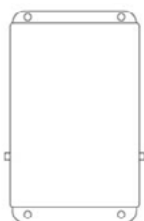
Features

- Coverage: up to 5 rooms. Can be expanded to cover <15 rooms
- Amplifies all mobile operators
- Clear Voice and high speed 4G/5G data
- Simple and intuitive LED indicator
- Everything included for complete installation
- PortSense - Automatically tests cables and connectors
- Bands: 28/20/8/3/1 - 5G/4G/3G/2G
- Listed on Ofcom website. Compliant with the Ofcom UK regulations.
- Remote monitoring (iR5 only)

Models

SKU	Bands	Dims	PSU	Remote Monitoring	Cell Scanning
R5-C	B28/B20/B8/B3/B1	35X30X4.3cm	12V, 5A	No	No
iR5-C	B28/B20/B8/B3/B1	35X30X4.3cm	12V, 5A	Yes	Yes
R4-C	B20/B8/B3/B1	35X30X4.3cm	12V, 5A	No	No

Standard kit includes:



R5 Classic repeater



External Antenna



Internal Antenna



Power Supply



12m External cable SD240

Do not use non Stella equipment with Stella repeaters.

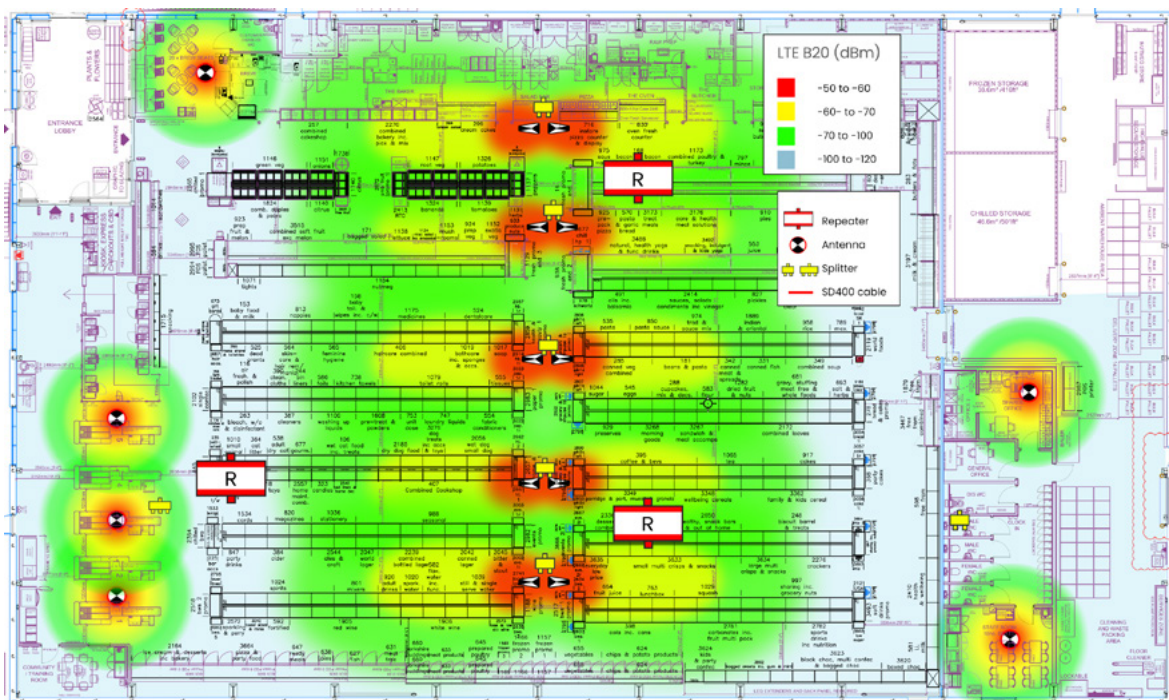
Stella repeaters operate silently on the operators network. Using Stella equipment with other manufacturers equipment will break this control system and could potentially harm the operators network. Doing so will void warranty.

Port Sense



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. If there is no issue with the connectors or cable, the white LED will turn on. This gives the installer peace of mind that all cables and connectors are OK. 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 within 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.

Antenna layout options

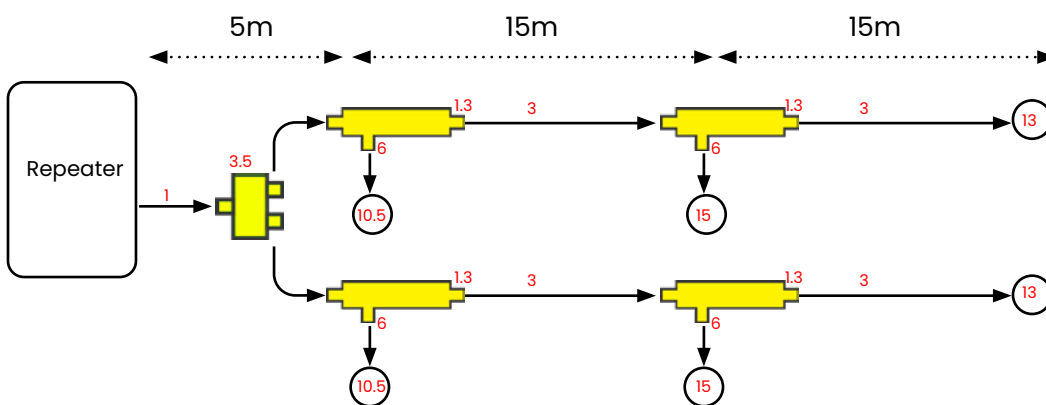
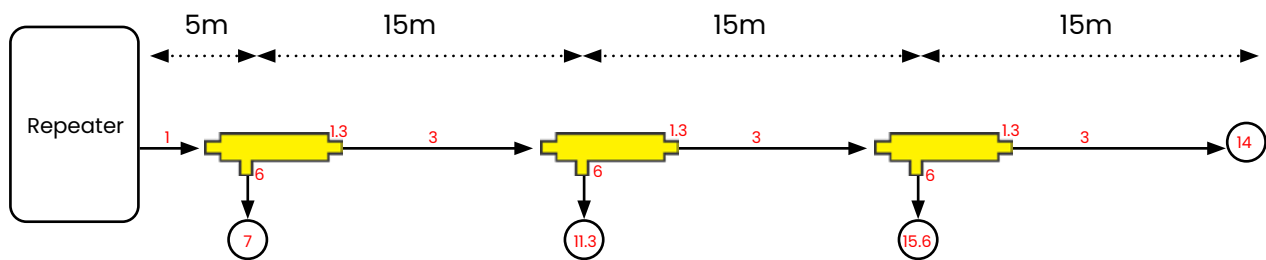
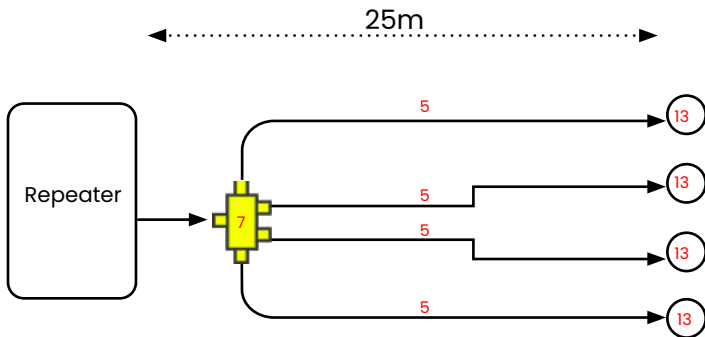
○ Indoor antenna

▬ Tapper

⊕ 2 way splitter

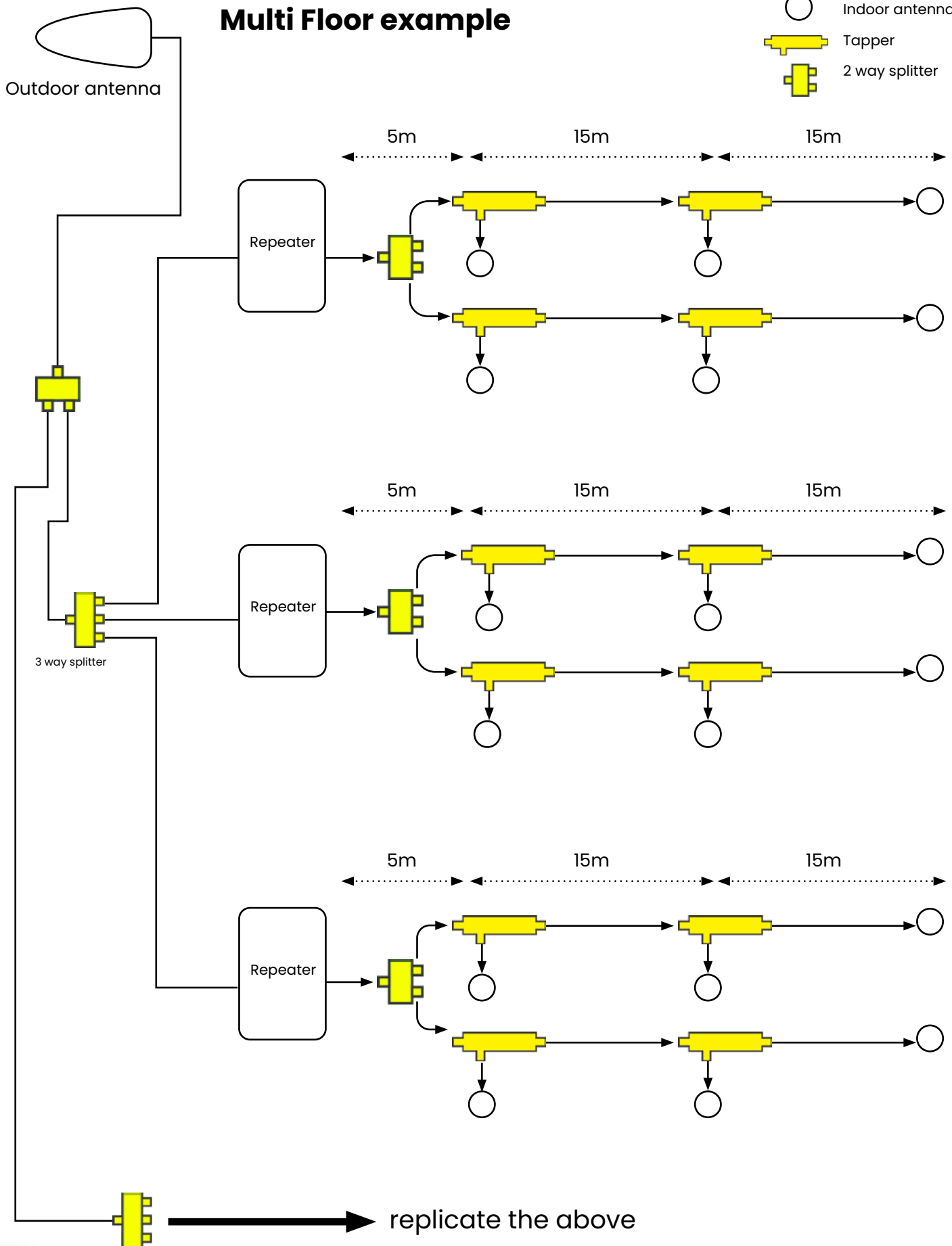
⊕ 4 way splitter

dB loss in red



Multi Floor example

- Indoor antenna
- ▬ Tapper
- ⊕ 2 way splitter



*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 ¹
Uplink Switch On	Yes ²
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

¹Automatically adjusts during installation. Thereafter, automatically adjusts for seasonal variation in path loss 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.

Note: Specifications subject to change without notice.



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