

Preliminary product Information: Rev 1A, Issue Jan 2014, Revised Jan 2014

**Custom band selective RF repeater GR800 is an indoor bi-directional amplifier that offers an increase of signal strength in medium-sized rooms.**

## KEY FEATURES

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- LTE800 support
- Customer specified frequency band
- Compact design for easy installation
- Integrated antenna (or connector for indoor delivery network)
- Uplink & Downlink gain is separately adjustable
- Automatic gain control
- Low power consumption
- Status indicating LEDs

## APPLICATION AREAS

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- Shopping centers
- Hotels, offices
- Factories
- Underground parking lots



Figure 1: Repeater GR800 front view

## PRODUCT DESCRIPTION

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Generally repeaters are used in mobile communication systems to provide signal coverage for an area with poor or no signal (e.g. blind spot). Rantelon Ltd came across the insufficient coverage within buildings such as offices, parking lots, apartment buildings, shopping malls, subways and tunnels.

RF repeater GR800 series can solve these problems by amplifying the available signal from an outdoor antenna into weak coverage area via built-in antenna or indoor delivery network with multiple antennas.

LEDs on the front panel indicate proper power supply, activity of automatic gain control circuits and other nodes of GR800.

### TECHNICAL SPECIFICATIONS

Parameter	Specification
Frequency range*	DL: 791-821MHz & UL: 832-862MHz
Number of independent band-segments	Uplink: 1 / Downlink: 1
Band-segment properties	Fixed by factory
Band-segment bandwidth	10MHz (other bandwidth is available on order)
Max. gain	60dB ±2dB
Manual gain adjust range	20dB
Automatic gain control	30dB
Downlink output power*	+18dBm @ one carrier
Uplink output power*	+18dBm @ one carrier
Noise figure	7.5dB
Return loss	10dB
Spurious emission	According to ETSI standards: < -36dBm up to 1GHz; < -30dBm above 1GHz
Supply voltage	DC: +9V..+33V
Current consumption	1.3A @ +9V; 0.35A @ +33V;
RF connector	N-Female (SMA optionally)
Operating temperature range	-20 ... +60 °C
Pure dimensions	120 x 190 x 60mm

\* Ask Rantelon for other parameters. See [www.rantelon.com](http://www.rantelon.com) for more information.

### ORDERING INFORMATION

Model	Description
GR800-01/xN	With integrated coverage (indoor) antenna
GR800-01/xNN	With RF output (coverage/indoor) connector

Rantelon reserves the right to change the specification without notice.