

Product Information: Rev 1A, Issue Jan 2014, Revised Jan 2014

Repeater GR385 is an indoor bi-directional amplifier that offers an increase of signal strength in medium-sized rooms.

KEY FEATURES

- High output level
- Bi-directional
- Compact design for easy installation
- UL & DL gain is separately adjustable
- Automatic gain control
- Low power consumption
- Extended range of supply voltages:
+9V up to +33V
- Small dimensions and light weight
- Status indicating LEDs
- Customer specified frequency bands

APPLICATION AREAS

- Inside buildings
- Airports
- Underground stations, tunnels



Figure 1: Repeater GR385 front view

PRODUCT DESCRIPTION

Repeaters are used in emergency services and government 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, tunnels and etc.

Indoor repeater GR385 series can solve these problems by amplifying the available signal from an outdoor antenna into weak coverage area via indoor delivery network with single or multiple antennas. Very well filtered frequency bands provide possibility to improve signals in both downlink and uplink directions.

GR385 is equipped with new switching power module allowing extended range of supply voltages: +9V up to +33V.

Three LEDs on the front panel indicate proper power supply and activity of automatic gain control circuit for both direction downlink and uplink.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Frequency range*	UL: 385-390MHz & DL: 395-400MHz
Bandwidth	5MHz (other bandwidth is available on order)
Gain	68dB ±2dB
Manual gain adjust range	15dB
Automatic gain control	30dB
Downlink output power*	+16dBm @ one carrier +13dBm @ two carriers
Uplink output power*	+16dBm @ one carrier +13dBm @ two carriers
Spurious emission	According to ETSI standards: < -36dBm up to 1GHz; < -30dBm above 1GHz
Noise figure	7.5dB max
VSWR	1.8:1 [50Ω]
Supply voltage	DC: +9V..+33V
Current consumption	1.0A @ +9V; 0.8A @ +12V; 0.4A @ +24V;
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 for more information.

ORDERING INFORMATION

Model	Description
GR385-1/xNN	With RF output (coverage/indoor) connector

Rantelon reserves the right to change the specification without notice.