

## MRE047

### MR PowerMAX GSM 1800

#### Description

The MR PowerMAX GSM 1800 mobile repeater kit is an ideal solution for providing a cost effective improvement in cellular in-building coverage of a home, office, restaurant or buildings up to 1000 sq meters.

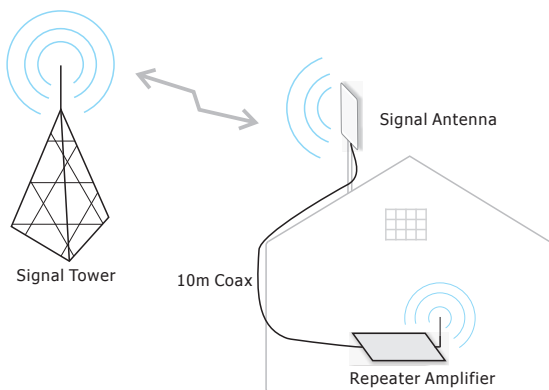
The MRPowerMAX GSM 1800 works on the 1800MHz frequency. It is designed to improve the call or data transmission quality of an area by receiving, amplifying and re-transmitting signals of the base station mast into a specified area up to 1000 sq meters and supports up to 75 users.



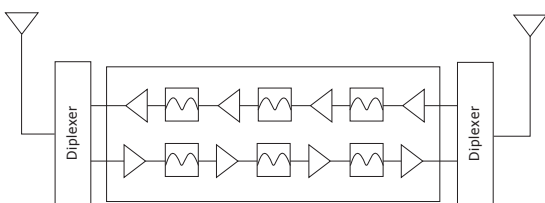
#### Key Features

- ✓ GSM 1800MHz Networks
- ✓ 65 dB gain
- ✓ Coverage up to 1,000 sq m
- ✓ Supports up to 75 users
- ✓ High gain signal antenna
- ✓ All GSM 1800 networks (Orange/T-mobile)

#### Working Principle



#### System Diagram



#### Package includes

- 1 x PowerMAX GSM 1800MHz cellular repeater
- 1 x External aerial antenna
- 1 x Indoor rubber whip re-broadcast aerial
- 1 x 10 meter coax cable for external aerial
- 1 x AC/DC power supply
- 1 x Installation manual

#### Electrical Specifications

Item	Uplink	Downlink
Frequency (GSM900)	1710-1785MHz	1805-1880MHz
Maximum Gain	≅ 60dB	≅ 65dB
Ripple in Band	≅ 5dB	
Max. Input Power without damage	- 50 dBm	- 80 dBm
Output Power	≅ 21 dBm	
Spurious Emission (9KHz-1GHz)	≅ -36dBm	≅ -36dBm
Spurious Emission (1GHz-12.75GHz)	≅ -30dBm	≅ -30dBm
Noise Figure @ Max. Gain	≅ 6dB (Typical)	
Return Loss	≅ 3dB	
Time Delay	≅ 0.5μs	
MTBF	> 50000hours	
Power Supply	DC 12V 2A	
Power Consumption	< 10 Watt	
Impedence	50 ohm	

#### Mechanical Specifications

RF Connector	External: N-Female / Internal: SMA-Female
Cooling	Heatsink convection cooling
Dimensions (DxWxH)	194 x 234 x 30 mm
Weight	1620 Gram
Environment Conditions	IP 40
Humidity	< 90%
Operating Temperature	-10C - 60C