

GSM900 Split Band Pico Repeater

SP-9132



Features

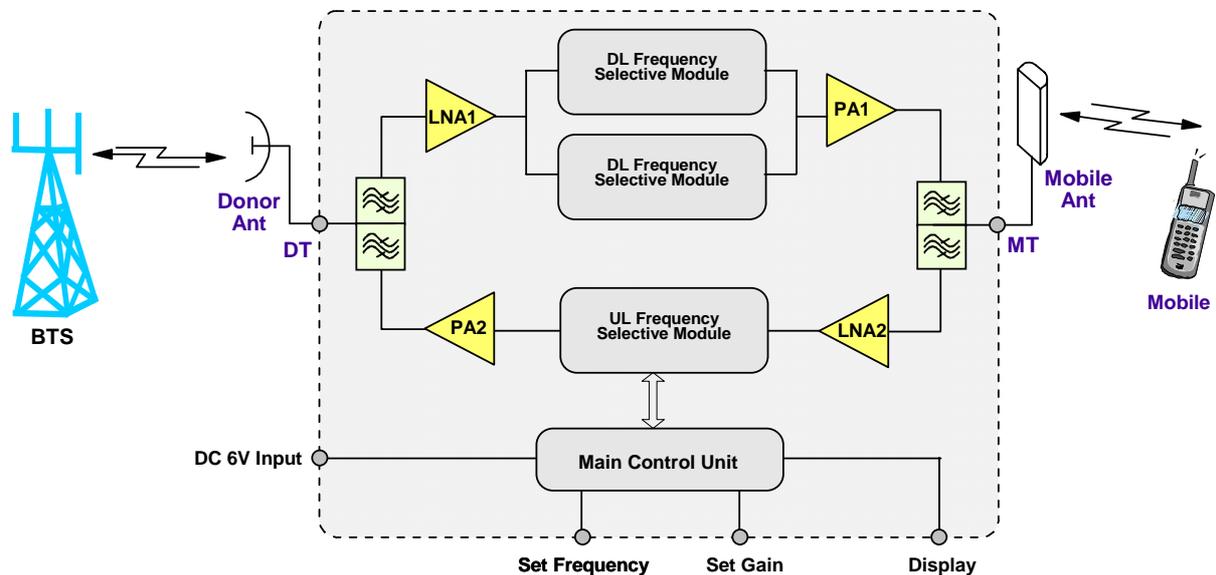
- Split band design with option to accommodate customer specific frequency assignments.
- IF filtering technology is adopted for in-band signal selection and out-of-band signal suppression.
- With integrated antenna (6dBi gain) and option for connecting external antenna.
- Broadband linear power amplifier ensures un-distorted amplification of GSM900 signals.
- Low noise amplifier improves uplink system noise figure for better voice quality and reduced drop call.
- System commissioning can be performed without using any additional tools or equipment.
- Highly integrated design with miniaturized enclosure, small size, light weight and easy to install.



Product Description

SP-9132 GSM900 Split Band Pico Repeater is designed for indoor operations. It is a bi-directional amplifier that is used to enhance signal strength in small-and-medium-sized areas in a GSM900 network. The system gain is compensated automatically according to the temperature variation within the equipment enclosure, which ensures stable operation under ambient temperature functions. It is best suitable for provision of signal coverage within offices and residential apartments.

Functional Block Diagram



Technical Specifications

Model		0.04W	
Electrical			
Frequency Range	Downlink (default)	MHz	938 – 953 and 943 – 958
	Uplink	MHz	890 – 915
Maximum System Gain		dB	60
Operating Bandwidth	Downlink	MHz	6* and 4*
	Uplink	MHz	25
Gain Adjustment Range (1dB step)		dB	0 – 20
Output Power, Downlink	With Integrated Antenna	dBm	16 ± 1.5
	Without Integrated Antenna	dBm	15 ± 1.5
Output Power, Uplink		dBm	16 ± 1.5
Pass Band Ripple, p-p		dB	≤ 5
System Group Delay		μsec	≤ 6
System Noise Figure UL at Maximum Gain		dB	≤ 8
Spurious	9KHz – 1GHz	dBm	ETSI EN 300 609 – 4 V8.0.2
	1GHz – 12.75 GHz	dBm	
Out-of-band Gain		dBm	
Intermodulation		dBm	
Input VSWR			≤ 2.0
Absolute Maximum RF Input Power		dBm	+10
Impedance		Ω	50
Power, Mechanical & Environmental			
Dimensions, H x W x D		mm	235 x 150 x 68
Weight (approx.)		kg	2.5
Power Supply		VAC	90 – 264 / 45 – 65Hz
Power Consumption (approx.)		W	20
Enclosure Cooling			Convection
RF Connectors			SMA
Operating Temperature		°C	-20 to +40
Operating Humidity		%	≤ 85
Environmental Class			IP40
MTBF		hr	> 50,000

Note: Typical specification at room temperature

*Center frequency adjustable

DL center frequency: 938 – 953MHz(6MHz Operating Bandwidth)

DL center frequency: 943 – 958MHz(4MHz Operating Bandwidth)

System Commissioning

The system commissioning of SP-9132 can be performed without using any additional tool or equipment. Once the equipment lid is removed, programming the equipment is through operating the integrated control panel with visual feedback by LEDs:

With the front cover removed, a control panel which is used to display and set the working parameters of the equipment is revealed:

- A two row LCD display provides visual feedback of all RF parameters.
- A keypad is used to program all RF parameters.

Outline Drawing

