



## PRODUCT DESCRIPTION

RETEMSA's SolBoost repeater is a bi-directional superheterodyne receiver/transmitter designed to provide cost effective coverage for rural areas where GSM signal is weak. As band selective repeater, it allows to enhance coverage only for those operators the customer requires.

## PRODUCT FEATURES

- Minimum site requirements thanks to its advanced IC (Interference Cancellation up to 50 dB) technology that lets donor and service antennas installation in the same low cost tower/mast with limited separation (< 4 meters).
- Low consumption (< 50 w) allowing the use of solar panels to power the system at a competitive cost.
- E-saver energy saving functionality minimizing power requirements when battery levels are low.
- Plug & Play solution with auto-configuration software.
- Band Selective solution enabling no change in existing network configuration and features.
- Remote operation & maintenance via built-in modem (CSD or GPRS, SNMP).
- Available in 850, 900, 1800 and 1900 frequency bands.
- Up to 33 dBm output power, with up to 100 dB gain.
- 60 dB dynamic margin, with ALC loops to suppress unwanted disturbing radio signals.
- Versions conforming to FCC or ETSI standards.

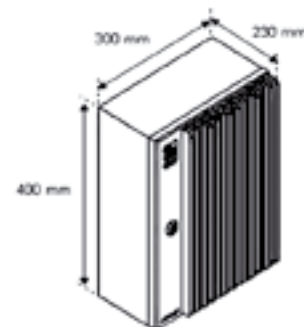


## MECHANICAL AND ENVIROMENTAL SPECIFICATIONS

Parameters	Test Conditions	Downlink			Uplink			Units
Work Band	At -3 dB	customized			customized			MHz
BandWidth	At -3 dB	customized			customized			MHz
Parameters	Test Conditions	Min	Typ	Max	Min	Typ	Max	Units
OutPut power (1 carrier)	1dB compression point		+32	+33		+32	+33	dBm
OutPut power (2 carriers)	FCC compliant		+29			+29		dBm
	ETSI compliant		+22			+22		dBm
IP3	Two equal carriers		+40			+40		dBm
Input sat. Level (1 carrier)	1 carrier		-20			-20		dBm
Out of band rejection		± 1 MHz			± 2 MHz			
		Min	Typ	Max	Min	Typ	Max	
Uplink			-30			-45		dB
Downlink			-30			-45		dB
Parameters	Minimum	Typical		Maximum		Units		
Uplink Gain (1dB steps programmable)	45	95		100		dB		
Downlink Gain (1dB steps programmable)	45	95		100		dB		
In Band Ripple		± 2				dB		
ALC window		60				dB		
Uplink Excitability		-80				dBm		
Downlink excitability		-80				dBm		
Noise factor		8				dB		
In/Out impedance		50				Ω		
Return losses		-10				dB		
Group Delay		2				µs		
Power Supply DC levels	20	24		40		Vdc		
Power consumption	33 (with e-saver)	45		50		W		

## ELECTRICAL SPECIFICATIONS AT Ta=25°C

<b>RF connectors</b>	N Female	Other options on demand
<b>MTBF</b>	100.000 Hours	
<b>Temperature range</b>	-20°C to 55°C	IP 55
<b>Package Dimensions (mm)</b>	WxHxD	300 x 400 x 230 mm



Factory defaults.  
Manufactured under ISO 9002.