



**MODEL CHIKI-3Gxxi
UMTS / 10 dBm**



Cost effective coverage for indoor
aplications

PRODUCT DESCRIPTION

RETEMOSA's CHIKI-3Gxxi repeater is a bidirectional superheterodyne receiver/transmitter designed to provide a cost effective coverage solution for small or midsize indoor areas where UMTS signal is weak. As band selective repeater, it allows to enhance coverage only for those operators the customer requires.

- *Small, light and easy to install, the CHIKI-3Gxxi is the perfect solution to improve coverage in offices, factories, airports, shops, hotels, parking lost, etc...*
- *Operator Band Selective whit optional integrate antenna.*
- *Conforms to ETSI recommendations thus provide selective coverage without interference to other operators*

PRODUCT FEATURES

- **Band Selective repeater** for UMTS (3G) systems.
- Full-duplex configuration based on heterodyne structure over IF 0 MHz
- Output power up to **10 dBm** / 1 carrier.
- Bandwith 5 or 15 MHz.
- Up to **60 dB** gain adjustable to avoid feedback problems and interferences in the UPLINK path.
- Dynamic margins 60 dB
- Automatic Level Control loops to suppress unwanted disturbing radio signals
- Full **3GPP TS 25.143 V 6.0.0** - COMPILANT
- Optional 2 dBi antenna (CHIKI-3G032A).
- AC/DC external adaptor for easy installation.
- Custom box designed with i.e. operator logo.

ELECTRICAL SPECIFICATIONS AT Ta=25°C:

Parameters	Test Conditions	Downlink			Uplink			Units
Working Band	At -3 dB	2170 – 2110			1920 – 1980			MHz
BandWidth	At -3 dB	5 or 15			5 or 15			MHz
Parameters	Test Conditions	Min	Typ	Max	Min	Typ	Max	Units
OutPut power (1 carrier)	1 dB compression		+10			+10		dBm
OutPut power (2 carrier) ¹	1 dB compression		+7			+7		dBm
IP3	Two equal carriers		+28			+28		
Imput sat. Level	1 carrier		-20			-20		dBm
Out of band gain (Ref: 0 dB)		± 1 MHz			± 2 MHz			
		Min	Typ	Max	Min	Typ	Max	
Uplink			40			30		dB
Downlink			40			30		dB
Parameters	Minimum	Typical		Maximum			Units	
Uplink Gain (5 dB steps set in a 4 position switch)	45	50-55		60			dB	
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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		-12					dB	
Group Delay		2					μs	
Power supply AC levels	100	220		260			Vac	
Power consumption		10					W	

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS:

RF connectors	SMA Female	Other options by demand
MTBF	100.000 Hours	3GPP TS 25.143 V6.0.0
Temperature range	0°C to 45° C	IP 43
Package Dimensions (mm)	WxHxD	105x129.5x33 mm

¹ Factory defaults. Manufactured under ISO 9002.

