



MODEL CHIKI-18xxi
GSM 1800 MHz / 13 dBm



Cost effective coverage for indoor applications

PRODUCT DESCRIPTION

RETEMOSA's CHIKI-18xxi repeater is a bidirectional superheterodyne receiver/transmitter designed to provide a cost effective coverage solution for small or midsize indoor areas where GSM 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-18xxi 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 GSM 1800 MHz Band systems.
- Full-duplex configuration based on heterodyne structure over IF 0 MHz
- Output power up to **13 dBm** / 1 carrier.
- Custom-made bandwidth.
- Up to **60 dB** gain adjustable to avoid feedback in case of low antenna isolation.
- Dynamic margins 60 dB
- Automatic Level Control loops to suppress unwanted disturbing radio signals
- **ETSI 300609-4** compliant.
- Optional 2 dBi antenna (CHIKI-18xxA).
- 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	1805 - 1880			1710 - 1880			MHz
BandWidth	At -3 dB	Customizable			Customizable			MHz
Parameters	Test Conditions	Min	Typ	Max	Min	Typ	Max	Units
OutPut power (1 carrier)	1 dB compression		+10	+13		+10	+13	dBm
OutPut power (2 carrier) ¹	1 dB compression		+7			+7		dBm
IP3	Two equal carriers		+28			+28		dBm
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		7					dB	
In/Out impedance		50					Ω	
Return losses		-10					dB	
Group Delay		2					μs	
Power supply AC levels	100	220		240			Vac	
Power consumption		10					W	

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS:

RF connectors	SMA Female	Other options by demand
MTBF	100.000 Hours	ETSI 300609-4 COMPILANT
Temperature range	0°C to 45° C	IP 43
Package Dimensions (mm)	WxHxD	105x129.5x33 mm

¹ Factory defaults. Manufactured under ISO 9002.

