



**MODEL PCSR14H-XXXT  
GSM 1900 MHz / 33 dBm**



[Quick deployment and cost effective coverage indoor / outdoor applications.](#)



[PC repeater configuration software](#)

### PRODUCT DESCRIPTION

RETEMOSA's model **PCSR14H-XXXT** repeater is a bidirectional superheterodyne receiver / transmitter that has been designed to provide coverage in buildings, parkings, tunnels (indoor applications) and rural areas, airports, motorways (outdoor applications).

RETEMOSA also has other Standard interfaces like optic fiber or radiating cable to specific applications.

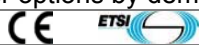
### PRODUCT FEATURES

- **Band Selective repeater** for GSM 1900 MHz systems.
- Full-duplex configuration based on heterodyne structure over 140 MHz
- Output power up to **33 dBm** / 1 carrier.
- Bandwidth customizable
- Gain from 35 to 85 dB, adjustable in steps of 1 dB with a Windows ® compatible software.
- Dynamic margins 75 dB
- Automatic Level Control loops to suppress unwanted disturbing radio signals
- Remotely controlled model can be managing with a standard computer and a modem (9600 bauds).
- Windows interface for configuration all parameters: uplink and downlink gain, ALC loops, channels, alarms reports, monitoring in / out levels.
- Complete system: fixed base plus control software includes.

### ELECTRICAL SPECIFICATIONS AT Ta=25°C:

Parameters	Test Conditions	Downlink			Uplink			Units
Work Band	At -3 dB	1930-1990			1850-1910			MHz
BandWidth	At -3 dB	Customizable			Customizable			MHz
Parameters	Test Conditions	Min	Typ	Max	Min	Typ	Max	Units
OutPut power (1 carrier)	1dB compression		+33	+34		+33	+34	dBm
OutPut power (2 carriers)	1 dB ompression		+20			+20		dBm
IP3	Two equal carriers	40	42		40	42		dBm
Input sat. Level (1 carrier)	1 carrier		-10	0		-10	0	dBm
Out of band gain (Ref: 0 dB)		± 1 MHz			± 2 MHz			
		Min	Typ	Max	Min	Typ	Max	
Uplink			-15			-45	-48	dB
Downlink			-15			-45	-48	dB
Parameters	Minimum	Typical		Maximum			Units	
Uplink Gain (1 dB step, software configurable)	35	80		85			dB	
Downlink Gain (1 dB step, software configurable)	35	80		85			dB	
In Band Ripple	± 1	± 1.5		± 3			dB	
ALC window	45	65		80			dB	
Uplink Excitability	-105	-100		-90			dBm	
Downlink excitability	-105	-100		-90			dBm	
Noise factor		4					dB	
In/Out impedance	47	50					Ω	
Return losses	-11	-12					dB	
Group Delay	4	4.5		5			μs	
Power supply AC levels	100	220		240			Vac	
Power consumption		40					W	

### MECHANICAL AND ENVIROMENTAL SPECIFICATIONS:

RF connectors	N Female	Other options by demand
MTBF	100.000 Hours	
Temperature range	-35°C to 55° C	IP 55
Package Dimensions (mm)	WxHxD	300x400x230 mm

<sup>1</sup> Factory defaults. Manufactured under ISO 9002.

