



## PRODUCT DESCRIPTION

RETEMSA has developed EasyBoost™, a very low cost family of repeaters for domestic use, intended to provide enhanced coverage at home for UMTS HSPA / HSDPA / HSUPA.

EasyBoost™ is a very small size, self-installing indoor equipment, with integrated coverage and service antenna. In order to avoid self oscillation, EasyBoost™ makes use of Retemsa's proprietary Switched Technology for interference cancellation.

EasyBoost™ reduces installation costs to zero, creating a real Plug & Play solution. Requiring neither engineering nor special installation procedures, it can be put to work by the final user with no technical knowledge.

Proprietary SSP (Start on Signal Presence) algorithms avoid noise contribution to the network during up-link inactivity periods.

## PRODUCT FEATURES

- Band Selective repeater for UMTS 2100 MHz band systems.
- Full-duplex configuration based on ZERO IF principle.
- Output power up to 7 dBm / 1 carrier, 4 dBm / 2 carriers and 3 dBm / 3 carriers.
- Three models with 5, 10 and 15 MHz bandwidth, where the central frequency is programmable.
- Gain from 45 to 80 dB, automatically adjusted to optimize the link budget in up and down links.
- Dynamic margin of 40 dB.
- Integrated donor and coverage antennas. Feedback is avoided by the use of Switched Technology, that allows the repeater to work with gain values up to 60 dB over the antenna isolation value.
- Very small size and real Plug & Play solution.



Great efficiency for domestic coverage applications.

## ELECTRICAL SPECIFICATIONS AT Ta=25°C:

Parameters	Test Conditions	Downlink		Uplink		Units		
Work Band	Center Frequency in the Range	2110 - 2170		1920 - 1980		MHz		
BandWidth	At -3 dB	5, 10, 15		5, 10, 15		MHz		
Parameters	Test Conditions	1 CH	2 CH	1 CH	2 CH	Units		
OutPut power	Under 3GPP TS 25.143 V 6.0.0 for P < 31 dBm	7	4	7	4	dBm		
Input sat. Level (1 carrier)	1 carrier	-10	-10	-10	-10	dBm		
Out of band gain (Ref: 60 dB)		± 2,7 MHz			± 3,5 MHz			
		Min	Typ	Max	Min	Typ	Max	
Uplink			< 60			< 45		dB
Downlink			< 60			< 45		dB
Parameters	Minimum	Typical		Maximum		Units		
Uplink Gain (automatically adjusted by the repeater)	45	-		80		dB		
Downlink Gain (automatically adjusted by the repeater)	45	-		80		dB		
In Band Ripple		± 1,5				dB		
ALC window		40				dB		
Uplink NF for 60dB		6				dBm		
DownLink NF for 80 dB		6				dBm		
In/Out impedance		50				-		
Return losses		-12				dB		
Group Delay		< 1				µs		
Power Supply DC levels	100	220		260		Vac		
Power consumption		14				W		

## MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS:

<b>RF connectors</b>	SMA Female	Other options on demand
<b>MTBF</b>	100.000 Hours	
<b>Temperature range</b>	0°C to 45° C	IP 42
<b>Package Dimensions (mm)</b>	WxHxD	154 x 84 x 38

Factory defaults.  
Manufactured under ISO 9002.  
Specifications subject to change without notice.

