



# CHANNEL SELECTIVE GSM OFFSET REPEATER

- 2W OUTPUT POWER
- NO ANTENNA ISOLATION REQUIREMENT
- HIGH SENSITIVITY
- HIGH DYNAMIC RANGE
- FULL REMOTE CONTROL
- EDGE COMPATIBILITY

This system uses two repeaters as one pair in a special configuration. One of them is located near to the base station. A small part of the transmitted GSM RF power is coupled out and this signal is converted to the same GSM band, but to different channel and transmitted to the far side counterpart. This unit can be installed more than ten kilometres away. The received signal is then converted back to the original GSM channel and transmitted to the mobile users and vice versa. As can be seen, there is no need to have an extra microwave link, this function is provided by the repeater itself. At the uncovered new site, a smaller „Baby cell” is created with the full capability of the „Mother cell” supported by the already existing BTS. It is a compact and reliable unit and it is especially advantageous to use it in villages, or open fields where the field strength is weak and the isolation between the repeater antennas is small. It is a cost effective solution to cover areas, which cannot be covered economically with base stations. Parameters and monitor voltages can be accessed by RS232 interface or through GSM modem.

### Electrical characteristics:

	Base station side <b>converter</b> unit		Far side <b>offset</b> unit	
	BRPB15		BRP015	
	Downlink	Uplink	Downlink	Uplink
Number of channels	4	4	4	4
Input frequency *	900 MHz *	900 MHz *	900 MHz *	900 MHz *
Output frequency *	900 MHz *	900 MHz *	900 MHz *	900 MHz *
Channel Spacing	200 kHz	200 kHz	200 kHz	200 kHz
Gain	50 dB	50 dB	90 dB	90 dB
Gain setting range /step	30 / 1 dB	30 / 1 dB	50 / 1 dB	50 / 1 dB
Noise Figure	--	<5 dB typ. 7 dB max.	< 4 dB typ. 6 dB max.	< 4 dB typ. 6 dB max.
Max. ALC level @ Vset=5V	35 dBm	10 dBm	35 dBm	35 dBm**
Factory setting (linear output power)	33 dBm	0 dBm	33 dBm	33 dBm**
ICP3	> 75 dBm	> 36 dBm	> 75 dBm	> 76 dBm typ
Out of band Gain	According to the ETSI regulation			
Harmonics	According to the ETSI regulation			
Spurious Radiation	According to the ETSI regulation			
Local Leakage	According to the ETSI regulation			
Local RS232 & Remote control & SMS	Yes / Yes / Yes			
Operating temp.	-20 to + 55 °C			
Supply Voltage	230V / 50 Hz AC			
Weight	48 kg			
Application	Outdoor			
Dimension	580 x 400 x 212 mm			

(\*) Channel frequency can be specified in the whole GSM band.

(\*\*)In case of 2 channel setup the output power can be set to +39 dBm.

Specifications are subject to change without notice.

