

DUAL BAND REPEATER
Rosenfelt RF-EDW10-15-A serie
900 MHz E-GSM & 1800 MHz DCS
& 2100 MHz UMTS



Electrical specification		Uplink	Downlink
Frequency Range		E-GSM 900 / DCS 1800 / UMTS 3G 2100	
Bandwidth	EGSM / GSM 900 MHz	880 - 915 MHz	925 - 960 MHz
	DCS 1800 MHz	1710 - 1785 MHz	1805 - 1880 MHz
	UMTS 2100 MHz	1920 - 1980 MHz	2110 - 2170 MHz
Max .Output Power	RF-EDW10-A	≥ 10dBm	≥ 13 dBm
	RF-EDW15-A	≥ 12dBm	≥ 15 dBm
Max .Gain	RF-EDW10-L	≥ 60 dB	≥ 60 dB
	RF-EDW15-L	≥ 65 dB	≥ 70 dB
Input Power		0 dBm (Max): Absolute	
MGC (Step Attenuation)		31 dB / 1 dB step	
Automatic Level Control		≥ 20 dB	
Ripple in band		total ≤ 6 dB	
Out of Band Gain	$2.7 \leq f_{\text{offset}} < 3.5 \text{MHz}$	< 60 dB	
	$3.5 \leq f_{\text{offset}} < 7.5 \text{MHz}$	< 45 dB	
	$7.5 \leq f_{\text{offset}} < 12.5 \text{MHz}$	< 45 dB	
	$12.5 \leq f_{\text{offset}}$	< 35 dB	
Spurious Emission	9kHz~1GHz	≤ -36 dBm	
	1 GHz ~12.75 GHz	≤ -30 dBm	
ACRR		20 dBc / 30 kHz@ ±5 MHz	
		20 dBc / 30 kHz @ ±10 MHz	
Frequency stability		≤ 0.01 ppm	
Error Vector Magnitude		≤ 12.5%	
Peak Code Domain Error		≤ -35 dB @ Spreading Factor 256	
Noise Figure		≤ 8 dB	
V.S.W.R		≤ 2.5	
Group Delay		≤ 1,5 μs	

Power Consumption	≤24 W
Cooling	Heatsink Convection cooling
ISO (Donor antenna and Service antenna)	Flickers every 1 s when isolation is insufficient; lights up when normal.
Self-oscillation Elimination & Turn-off	Real time isolation check and alarm:if self oscillation (isolation<gain) is detected, system will degrade the output power;if excessive self oscillation(isolation<gain - 15dB) is detected, it will turn off the device.
Input and Output signal strength	Show Input signal strength with numerical number. Shows Output signal strength with signal bars.
LED Alarm	Standard
Power LED	Green @ Normal work
Over Input Turn-off	If input is out of ALC range, system will turn off both uplink and downlink PA in 5s,and reboot them in 30+-5s;if input is out of ALC range for 3 consecutive times, the system will permanently turn off the devices, until the system is turned on again.

Mechanical Specifications	Standard
I/O Port	N-Female
Impedance	50 ohm
Operating Temperature	-10 °C ~ +55 °C
Environment Conditions	IP40
Dimensions	178*253*59mm
Weight	≤2.4 Kg
Power Supply	Input AC 100~240 V, output DC 12 V / 3A