

**TRI BAND REPEATER**  
**Rosenfelt RF-LED10-A**

800 MHz 4G LTE, 900 MHz EGSM , 1800 MHz DCS



Electrical specification		Uplink	Downlink
Frequency Range		LTE800 / GSM900 /DCS1800	
Bandwidth		Wide band	
	LTE 800 MHz	830 - 865 MHz	790 - 825 MHz
	EGSM 900 MHz	880 - 915 MHz	925 - 960 MHz
	DCS 1800 MHz	1710 - 1785 MHz	1805 - 1880 MHz
Max .Output Power		≥10dBm	≥13dBm
Max .Gain		≥65dB	≥70dB
Input Power		0dBm(Max) : Absolute	
MGC (Step Attenuation)		31dB / 1dB step	
Automatic Level Control		≥ 10dB	
Passband Ripple		Total ≤6dB	
Out of Band Gain	$2.7 \leq f_{\text{offset}} < 3.5\text{MHz}$	<60dB	
	$3.5 \leq f_{\text{offset}} < 7.5\text{MHz}$	<45dB	
	$7.5 \leq f_{\text{offset}} < 12.5\text{MHz}$	<45dB	
	$12.5 \leq f_{\text{offset}}$	<35dB	
Spurious Emission	9kHz~1GHz	≤ -36dBm	
	1 GHz ~12.75 GHz	≤ -30dBm	
ACRR		20dBc/30KHz@±5MHz	
		20dBc/30KHz@±10MHz	
Frequency stability		≤ 0.01ppm	
Error Vector Magnitude		≤ 12.5%	
Peak Code Domain Error		≤ -35dB@Spreading Factor 256	
Noise Figure		≤8dB	
V.S.W.R		≤ 2.5	
Group Delay		≤ 1,5 μs	
Power Consumption		≤24W	
Cooling		Heatsink Convection cooling	

<b>Intelligent Functions</b>	
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.

<b>LED Alarm</b>	
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.

<b>Mechanical Specifications</b>	
I/O Port	N-Female
Impedance	50 ohm
Operating Temperature	-10 °C ~ +55 °C
Environment Conditions	IP40