

**TRI BAND INLINE REPEATER**  
**Rosenfelt RF LED20T-L & LED23T-L**  
 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	831 - 861 MHz	791 - 821 MHz
	EGSM 900 MHz	880 - 915 MHz	925 - 960 MHz
	DCS 1800 MHz	1710 - 1785 MHz	1805 - 1880 MHz
Max .Output Power		≥0dBm	≥20 or 23dBm
Max .Gain		≥20 or 23dB	≥20 or 23dB
Input Power		0dBm(Max) : Absolute	
MGC (Step Attenuation)		31dB / 1dB step	
Automatic Level Control		≥ 20dB	
Passband Ripple		LTE≤10dB; EGSM≤10dB	
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		≤6 or 8dB	
V.S.W.R		≤ 2.0 or 3.0	
Group Delay		≤ 1μs	
Power Consumption		≤25W	
<b>Intelligent Functions</b>		Standard	
<b>LED Alarm</b>		Standard	
Cooling		Heatsink Convection cooling	

<b>Intelligent Functions</b>	Standard
ISO(Donor antenna and Service antenna)	Flickers every 1 s when isolation is insufficient; lights up
Smart Mode	Automatically adjusts gain fo rboth links according to the
Input and Output signal strength	Show Input signal strength with numerical number. Shows
<b>LED Alarm</b>	Standard
Power LED	Green @ Normal work
ALC LED	Green flickering @ ALC 1~10 dB; Orange flickering@ ALC

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