



2100MHz Single Band Home Repeater Kit

(FS21L1010D)



1. Introduction

“2100 Single Band Home Repeater» is a small-sized repeater for home use consists of Patch Antenna, Link Cable, Repeater and AC/DC Adaptor. Due to its Auto Gain Control and Isolation check function, easy installation is possible without test equipment or technician. In addition, this product can be simply connected to PC through its mini-USB port, and dedicated PC GUI. Service Antenna is built-in to the repeater to reduce extra antenna and cable.

“2100 Single Band Home Repeater” has following key features;

- Supports 2.1GHz LTE Simultaneously
- +10dBm Output with 60dB Gain
- Easy Installation by Built-in AGC, Isolation Check & Auto Shut Down feature
- Uplink Sleep Mode reduce the BTS Noise Floor
- Built in Service Antenna
- High Reliability & Proven Quality by Korean, Egypt & Malta Operators
- Compact Size of 90 * 125 * 35mm
- Fancy Cosmetic Design Fit with your Beautiful Home Interior

2. Application

- Home use
- SOHO

3. Kit consist of

- Repeater with Wall Mount Bracket
- Donor Patch Antenna
- 3D-FB Coaxial Cable, 10m
- AC/DC Adaptor, 5.9V / 2.5A

4. Electrical Specification (Common)

Item		Specification	Remark
Frequency Range	DL	2170 ~ 2150MHz	BW 20MHz
	UL	1980 ~ 1960MHz	
System Gain		60dB	
Output Level	DL	10+dBm / Total	Built-in Antenna
	UL	10+dBm / Total	Ext. Antenna
Gain Control Range / Step		30dB / 1dB	
Automatic Shutdown Level	DL	≤ 13dBm/Total	± 2dB
	UL	≤ 13dBm/Total	± 2dB
System Delay		≤ 6μs	
In Band Flatness		≤ 3dB	Peak-to-peak
TX/ RX Isolation		≥ 85dBc	
VSWR		≤ 1.5:1	
Noise Figure		≤ 6dB	@Max. Gain
Visual Alarms By LED		Power	
		Isolation	
		AGC	
		Over Power	
Dedicated PC GUI Interface Port		Micro USB 5P	
Power Consumption		AC 100~240V, 5W	5.9V, 2.5A Adapter

4-1. LTE Specification

Item		Specification	Remark
Spectrum Emission Mask	$0.05 \leq f_{\text{offset}} < 5.05 \text{ MHz}$	$-36\text{dBm} - \frac{6}{5} \left(\frac{f_{\text{offset}}}{\text{MHz}} - 0.05 \right) \text{dB}$ /100kHz	
	$5.05 \text{ MHz} \leq f_{\text{offset}} < 10.05 \text{ MHz}$	42dBm/100kHz	
	$10.05 \text{ MHz} \leq f_{\text{offset}} < f_{\text{offsetmax}}$	$\begin{cases} P - 52\text{dB}, 2\text{dBm} \leq P \leq 20\text{dBm} \\ -50\text{dBm}, P < 2\text{dBm} \end{cases}$ /1MHz	
Spurious Emission	9KHz ~ 150KHz	13-dBm/1KHz max.	
	150KHz ~ 30MHz	13-dBm/10KHz max.	

	30MHz ~ 1GHz	13-dBm/100KHz max.	
	1GHz ~ 12.75GHz	13-dBm/1MHz max.	
EVM(Error Vector Magnitude)		≤ 8%	
ACRR		+25dBc	

* Otherwise specified above, we fully comply with 3GPP standard.

5. Antenna Specification

Item	Specification		Remark
	Donor	Service	
Frequency Range	1,920 ~ 2,170MHz		
Gain	≥ 7dBi	≥ 2dBi	
Beam Width	Horizontal	≥ 60°	≥ 60°
	Vertical	≥ 50°	≥ 50°
F - B Ratio	≥ 15dB	≥ 15dB	
VSWR	≤ 1.5	≤ 2.0	
Polarization	Vertical		
Impedance	50Ω		
Maximum Input Power	20Watt		

6. Environmental Specification

Item	Specification	Remark
Operating Temperature	0 ~ 45°C	

7. Mechanical Specification

Item	Specification	Remark
Weight	Repeater Body	420g
	Whole Package	1.47Kg
Dimension, in mm(W*H*D)	Repeater Body	35 * 125 * 90
	Whole Package	75 * 236 * 377

8. Outline Drawing

