

# 850 1900 1700/2100 4G 2600 or 900 1800 2100 2600mhz Quad band signal repeaters



## Features

Embedded CPU, self-adaptive intelligent system very easy to use and install, better performance is guaranteed even under complicated and constantly changing RF environment conditions.

ISO: Intelligent isolation processing to avoid self-oscillation, quite wide adjusting range to stabilize the signal strength/quality for clearer voice/ higher data speed and avoid interference with mobile networks.

ALC: Intelligent automatic level control, quite wide adjusting range to stabilize the output power and improve the signal quality for clearer voice and higher data download speed.

LCD Display: Displays ISO status, ALC status, actual gain and downlink output power which makes booster installation and troubleshooting much easier.

MGC: Control buttons to adjust the gain for both uplink and downlink independently, 31dB range.

Excellent RF performance, larger coverage area, clearer voice and higher data download speeds.

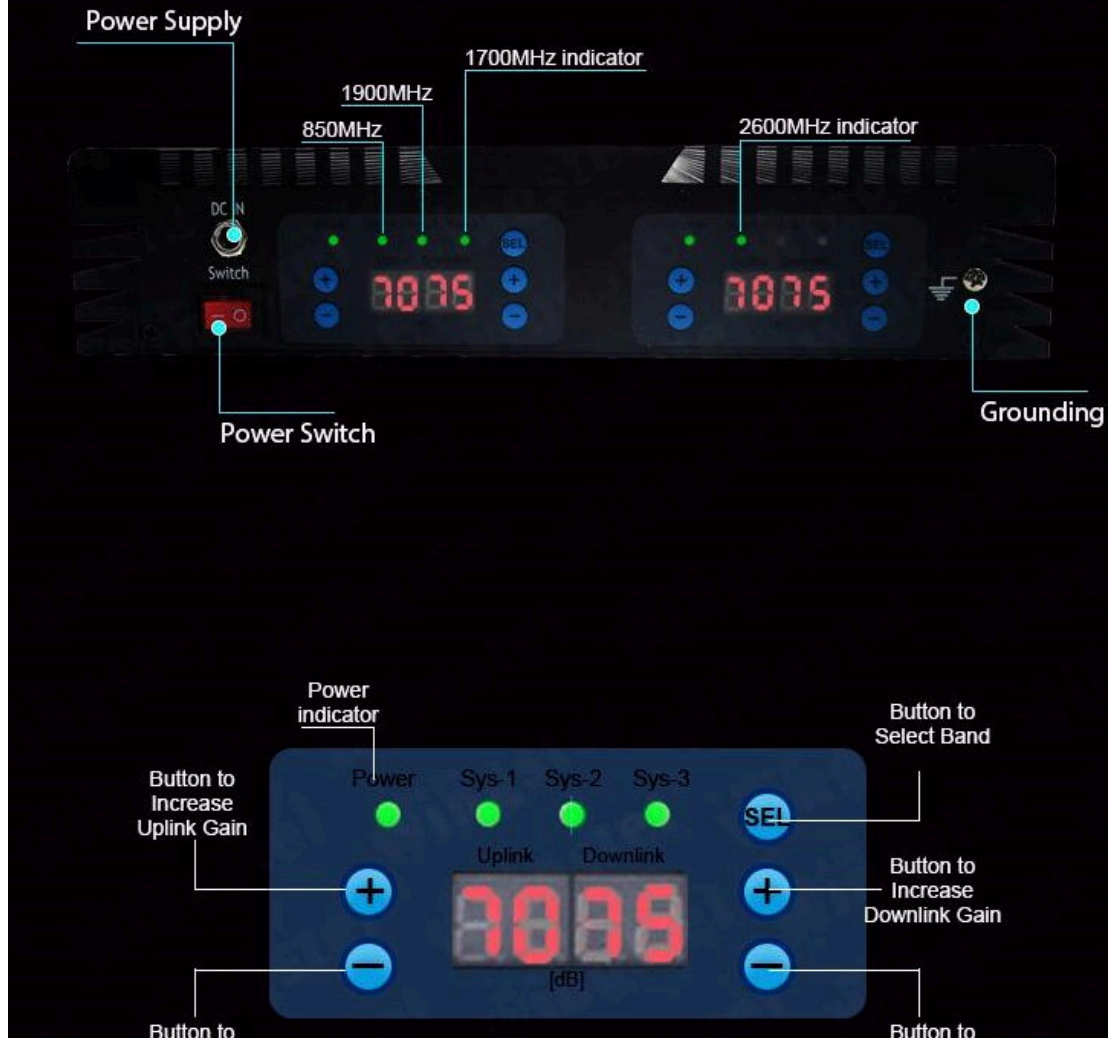
Elegant design, compact size, very low power consumption to minimize cost during operation and low heat dissipation.

**2****High Gain for Big Coverage at Compact Size***23dBm with Gain 75dBi to cover 800-1500m<sup>2</sup>***Size XL: 440\*250\*58mm****Weight: 12kgs****Specification of HPC-GDWL-27 Tri band repeater:**

Electrical specification	Uplink	Downlink	
Frequency Range	850MHz	824~849MHz	869~894MHz
	1900MHz	1850~1910MHz	1930~1990MHz
	2600MHz	2500~2570MHz	2620~2690MHz
	1700/2100MHz	1710-1755MHz	2110-2155MHz
	900Mhz	880-915MHz	925-960-2155MHz
	1800Mhz	1710 ~ 1785 MHz	1805 ~ 1880 MHz
	2100Mhz	1920-1980MHz	2110-2170MHz
	2600Mhz	2500~2570MHz	2620~2690MHz
	Max .Gain	≥ 65dB	≥ 75dB
Max .Output Power	≥ 24dBm	≥ 27 dBm	
MGC ( Step Attenuation )	≥31dB / 1dB step		

Automatic Level Control		$\geq 20\text{dB}$
Gain Flatness	GSM & CDMA	$T_{py} \leq 6\text{dB (P-P)}$ ; DCS, PCS $\leq 8\text{dB (P-P)}$
	WCDMA	$\leq 2\text{dB/ } 3.84\text{MHz}$ , Full Band $\leq 5\text{dB (P-P)}$
Noise Figure		$\leq 5\text{dB}$
VSWR		$\leq 2.0$
Group Delay		$\leq 1.5 \mu\text{s}$
Frequency stability		$\leq 0.01\text{ppm}$
Spurious Emission & Output inter-modulation		GSM Meet ETSI TS 151 026 V 6.1.0
		WCDMA Meet 3GPP TS 25.143 ( V 6.2.0 )
		CDMA Meet IS95 & CDMA2000
WCDMA System	Spurious Emission Mask	Meet 3GPP TS 25.143 ( V 6.2.0 )
	Modulation Accuracy	$\leq 12.5\%$
	Peak Code Domain Error	$\leq -35\text{dB@Spreading Factor } 256$
CDMA System	Rho	$\rho > 0.980$
	ACPR	Meet IS95 & CDMA2000
<b>Mechanical Specifications</b>		<b>Standard</b>
I /O Port		N-Female
Impedance		50 ohm
Operating Temperature		$-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Environment Conditions		IP40
Dimensions		268*250*53mm (L*W*H)
Weight		$\leq 4.50\text{Kg}$
Power Supply		AC90-264V, DC10V/6A

### 3 Digital Display Panel to Show Real-time Gain



## Advantages:

Digital Display Panel, Intelligent mode setting

Smart function called which can be activated via the digital display panel.

Users can choose gain and working system by LED Digital Panel.

Set the technical parameters simple and efficient, this is easier than DIP Switch.

## \*How to Adjust the Gain ?

1. Press the SEL button. The indicator becomes green when the corresponding band is selected.
2. Press the + button on the upper left to increase the uplink gain.
3. Press the - button on the lower left to decrease the uplink gain.
4. Press the + button on the upper right to increase the downlink gain.
5. Press the - button on the lower right to decrease the downlink gain.

4

## High Intelligence with AGC ALC function

To Maintain High Voice Quality and Low Interference to BTS

# AGC ALC



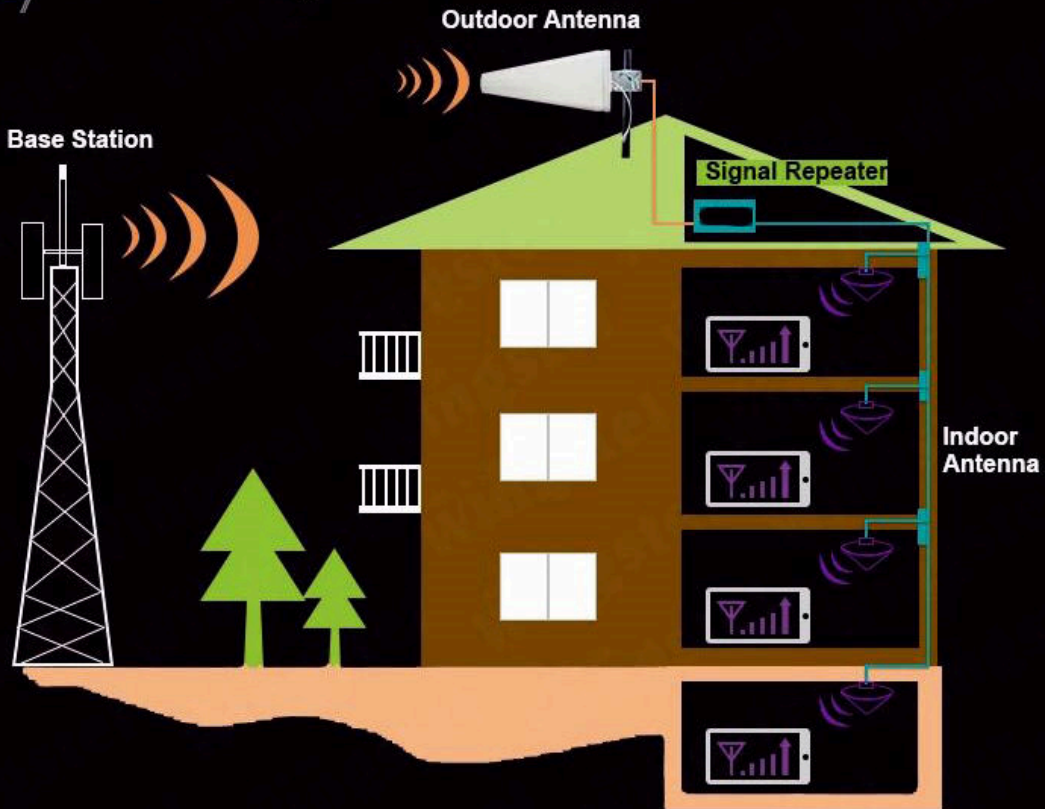
### Standard Package:

- 1) AC90-264V, DC10V/6A power supply adapter 1PCS
- 2) AC power cord (EU/US/UK/SA/China standard, etc) 1PCS
- 3) Installation kit 1PCS
- 4) User manual 1PCS

### Recommended Accessories:

- 1) Donor antenna: Log Periodic Antenna (9dBi or 11dBi, 806-960/1710-2700MHz)
- 2) Service antenna: Omni Ceiling Antenna (3dBi, 806-960/1710-2700MHz)
- 3) 5D-FB coaxial cable with connectors (Cable length optional)

## 5 How the Signal Booster Works:



1

### Receives signal

With the help of outdoor antenna, booster picks up the mobile signal.

2

### Boosts signal

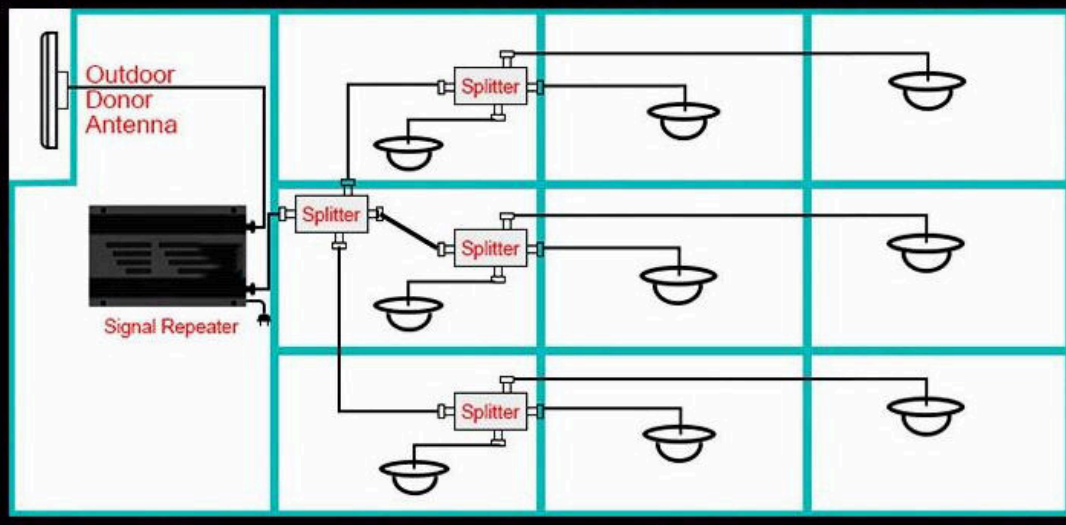
The booster gets the signal, amplifies it and transmits it to the indoor antennas.

3

### Broadcasts signal

The indoor antennas spread the booster signal all around your area.

## Installation diagram



## 6 Accessories Needed

- 1 Outdoor donor antenna:  
log periodic antenna  
(8/9dBi or high gain 11dBi)



- 2 Indoor service antenna:  
omni ceiling antenna (3dBi),  
or panel antenna(6/8dbi)



- 3 LMR300 or LMR400  
coaxial cable with connectors  
(different length available:  
5m, 10m, 15m, 20m etc)



- 4 Coupler or splitters to connect  
the indoor antennas  
2-way splitter  
3-way splitter  
4-way splitter  
Coupler

