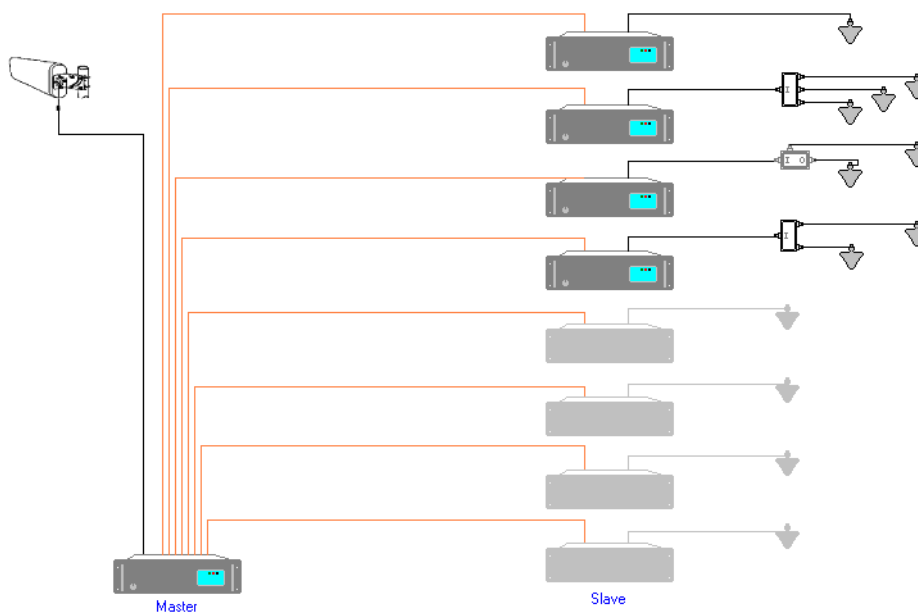


## Wireless Optical Repeater

The fiber optic repeater consists of two units: one master and slaves.

**The local unit**(Master Unit) receives BTS signal via donor antenna and converts RF signals into optical signals for further distribution to the **remote repeater**(slave Units), then the amplified signals are to cover the appointed area. A master can be configured with a number of slaves, working in situations such as towns, highway, tunneling and indoor buildings.

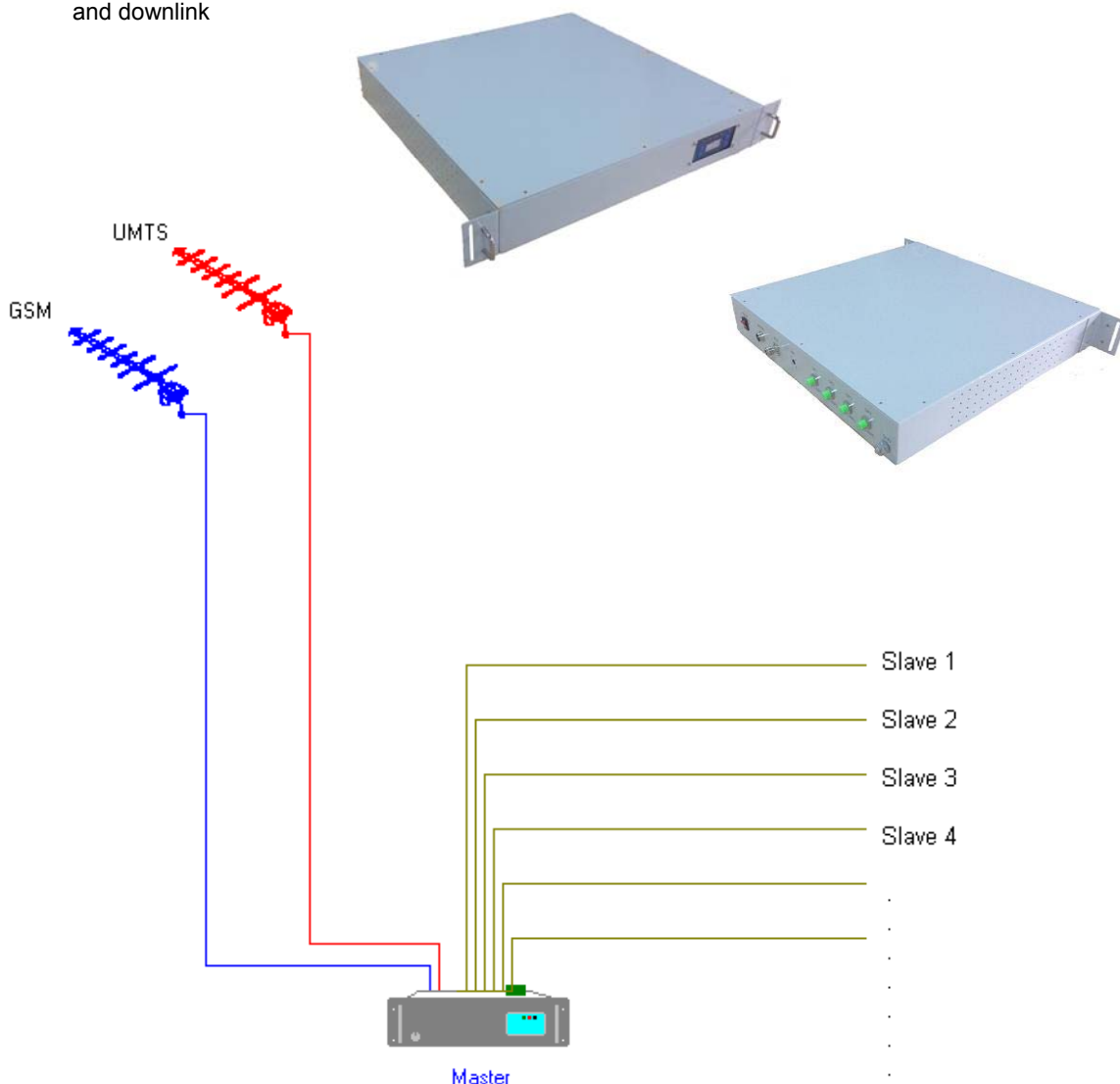


The products overcome the isolation to ensure high output power on sites where the repeater's gain was limited by the isolation between the donor and the coverage antenna that compared with conventional repeaters.

It is applied to expand signal coverage or fill signal blind area where signal is weak, such as tunnel, village and mining well long distance application etc.

**Product Features**

- ❑ Apply to CDMA/GSM/DCS/UMTS systems, Frequency bands can be customized for operators
- ❑ Application integrated with O/E module
- ❑ One Donor Unit can support up to 1/4/8/16 Remote Units to maximize utilization
- ❑ High system gain, High system output power
- ❑ Light weight, small dimensions, easy to install
- ❑ Easy set UL/DL gain @each band via local monitor Board manually to reduce interference to BTS site. Gain adjustment step is 1dB and the adjustment scope is 30dB.
- ❑ Smart Automatic Level Control (ALC) to reduce interference to BTS
- ❑ Linear power amplification to effectively suppress inter-modulation and spurious emission
- ❑ An alarm interface with unique color LEDs to indicate power supply and signal level of uplink and downlink



## Technical Specifications

Items	Uplink	Downlink
Fiber wave length	1550 nm	1310 nm
Optical output power(Customized)	5dBm	5dBm
Fiber Link Budget	10dBo	10dBo
Optical Receive Sensitivity	-18 dBm (C/N≥24dB)	
Fiber Optical Connector	FC/APC	
Fiber Optical Type(Customized)	Single mode :1.31/1.55	
Fiber Optical Distance	0~10km	
System Specification		
Frequency Range (Customized)	Single band, dual band,triband GSM: 890-915/935-960 or 885-915/930-960MHz DCS:1710-1785/1805-1880 MHz UMTS:1920-1980/2110-2170 MHz	
Gain	Master:45dB/Slave:45dB	Master:45dB/Slave:45dB
Output Power(Customized)	23±2 dBm	30±2 dBm
Gain Adjustment Range	≥ 30 dB for Master and Slave	
Gain Adjust precision	0~10dB/±1dB#10~20dB/±1.5dB#20~31dB/±2dB	
ALC Scope	≥ 20dB	
In-Band Ripple	≤ 10 dB	
I/O Impedance	50 Ω	
VSWR	≤1.5	
Load VSWR Tolerance	20:1	
Noise Figure	≤ 5dB	
Inter-modulation Attenuation	45dBc	
Spurious Emission	≤-36dBm(9KHz~1GHz)/≤-30dBm(1~12.75GHz)	
System Delay	≤ 5μs	
Max Input Power Level(1minute)	-10dBm	
RF Connector(Customized)	N female	
Temperature Range	Operation: -25°C ~ + 55°C;Storage: -30°C ~ +60°C	
Relative humidity	5~95% RH	
Power consumption	70W	
Power Supply (Customized)	AC 110V /220V	
Dimensions	550×560×120mm	
Weight	8.0 kg	
Cabinet Color	Silver white	