## Fiber Optic Repeater\_Dual Bands

### 700-900 MHz Fiber Link-404 (Microwave Transmission)



#### LTE700+LTE900

The Fiber Optic Repeater (FOR) is designed to solve problems of weak mobile signal in the place that is far away from the Base Transceiver Station (BTS) and has fiber optic cable network underground.

The system consists of two parts: Master Unit (MU) and Remote Unit (RU). The MU captures the BTS signal via direct coupler closed to BTS, then converts it into working frequency and transmits the amplified signal to the RU via 5.8GHz Microwave transmission signal. The RU will reconvert the microwave transmission signal into working frequency and provide the signal to the areas where network coverage is inadequate. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

## **Key features**

- > Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion.
- Tx/Rx control and alarm messages can be transmitted via one Microwave transmission.
- Stable and improved signal transmission quality.
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink.
- USB/RJ45 port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater via Ethernet.

## **Advantages**

- Multi\_standards/Multi\_operators
- Remote control
- **5.8GHz Microwave transmission**
- ☑ Low consumption

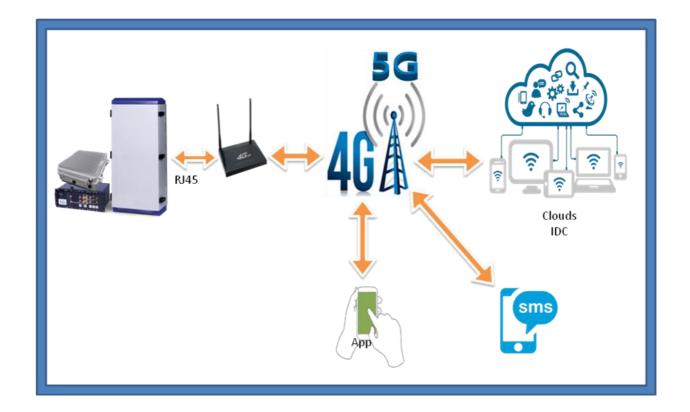


# **Specifications**

#### **Technical characteristics**

Item		Donor Unit	Remote Unit
		LTE700&LTE900	
Working Frequency	Uplink	703~748MHz&885~915MHz	
	Downlink	758~803MHz&930~960MHz	
Link Frequency	Uplink	5725~5850MHz	
	Downlink	5725~5850MHz	
Transmission Distance		≤ 10km	
Maximum Input Power (Non- Destructive)		0dBm	
No. of Channels		1 Carrier per Band(20MHz Each Carrier))	
Frequency Error		≤ 0.01ppm	
	Uplink	-10±2dBm	27±2dBm
	Downlink	27±2dBm	43±2dBm
Maximum Gain(Cab	le Access)	45±3dB	90±3dB
Gain Adjustment Range		1~31 dB @ Step of 1 dB	
ALC Range		≥ 20dB	
VSWR		≤ 1.5	
Noise Figure		≤ 6dB(Only for Uplink)	
In-Band Ripple		≤±3dB	
EVM		≤ 8%	
System Delay		$\leq 10\mu Sec$	
Spurious Emission		9kHz~1GHz: ≤ -36dBm	
		1GHz~12.75GHz: ≤ -30dBm	
I/O Impedance		50Ω	
RF Connector		2x4.3-10 Female	
Temperature Range		Operation: -25°C ~ + 55°C / Storage: -30°C ~ +60°C	
Relative Humidity Range		$\leq$ 95% (Non Condensing)	
Power Supply		DC48V or AC110/220V, 50/60Hz	
Power Consumption		≤ 100W	≤ 220W
Dimensions		447*357*203mm	447*357*203mm
Weight		≤ 20kg	≤ 20kg
Application		Indoor or Outdoor(IP65)	
Local Control		Via USB and Wi-Fi Hotspot	
NMS Mode(Optional)		4G Wireless Modem(Cloud Network Management System)	

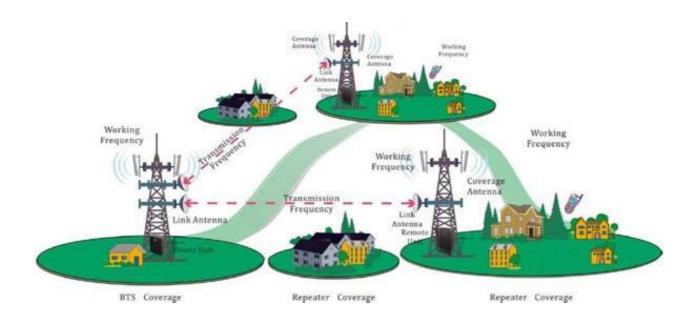
### **Network Management System (NMS)**



# Applications

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To expand signal coverage or fill signal blind area where signal is weak or unavailable. Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, ... Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, ...



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