900MHz+2100MHz Dual-Band Fiber Optic Repeater

Model: FIBER LINK 404(Master Unit)

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 and Remote Unit. The Master unit captures the BTS signal via direct coupler closed to BTS, then converts it into optic signal and transmits the amplified signal to the Remote Unit via fiber optic cable. The Remote unit will reconvert the optic signal into RF signal 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.

Features

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Stable and improved signal transmission quality
- One Master Unit can support up to 8 Remote Units to maximize utilization of fiber optic cable
- USB/RJ45 port provides a link to a notebook for local supervision or to the built-in wireless modem or 4G Router to communicate with the NMS (Network Management System) that can remotely supervise repeater’s working status and download operational parameters to the repeater by a notebook or mobile phone with APP.

Applications

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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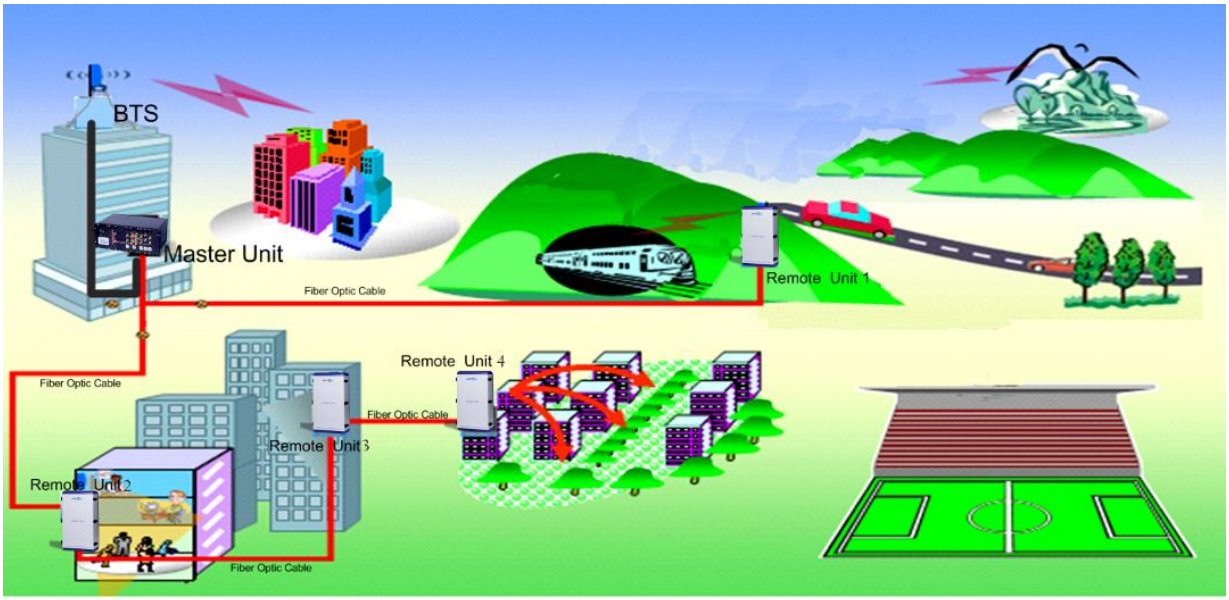
Application Diagram



Technical Specifications

Item		Specifications
System		UMTS/LTE900&UMTS/LTE2100
Working Frequency	Uplink	885~915MHz&1920~1980MHz
	Downlink	930~960MHz&2110~2170MHz
Working Bandwidth		30MHz&60MHz
Maximum Input Power (Non-Destructive)		10 dBm
Transmission Distance		≤ 20km(1:1) ≤ 10km(1:4)
MU Extensible Support the RU Quantity		1 or 4
System Gain(MU+RU)		≥45dB(Cable Access)
RF Output Power(UL)		-5±2dBm per Band
Manual Adjustable Attenuator		0~30dB/Step 1dB
Noise Figure@1RU Connection		≤5dB
Optical Output Power		0±3dBm@1310nm/0±3dBm@1550nm
Fiber Type/Number		Single mode
Optical Receiver Sensitivity		≥-15dBm
Optical Connector Type		1 or 4xFC/APC
RF Connector Type		2xN-Female
I/O Impedance		50Ω

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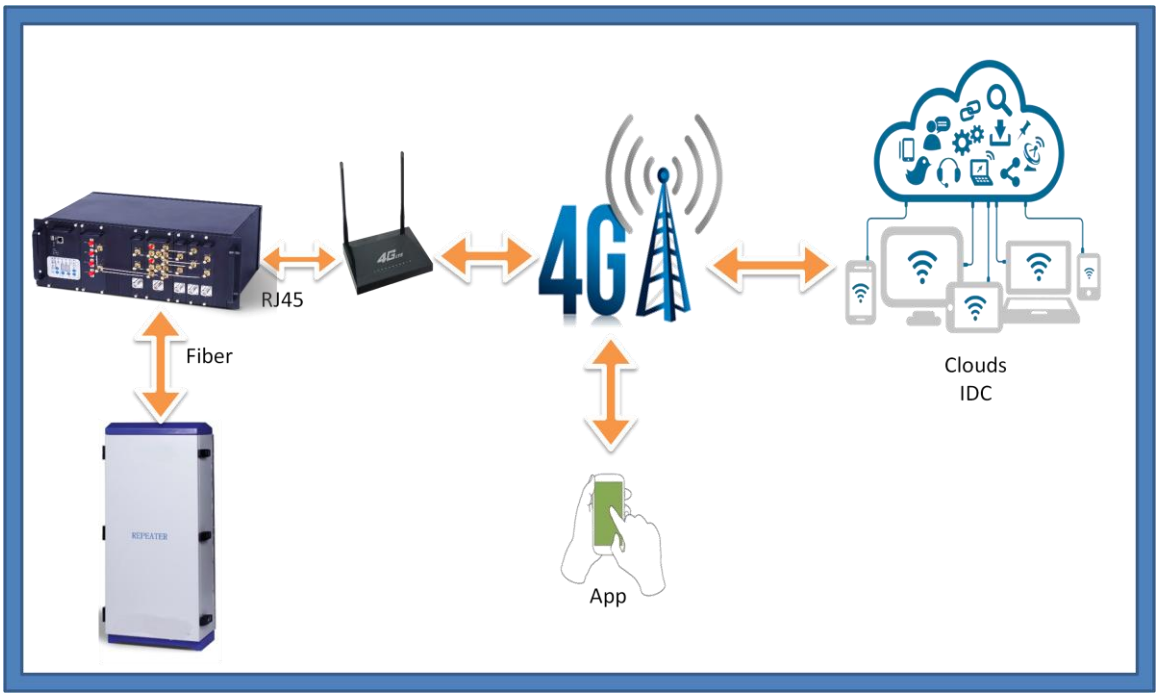
Ingress Protection	IP30
Local Monitoring Interface	USB2.0
Remote Monitoring	Cloud Network Management System (Via RJ45 Interface and 4G Wireless Modem)
Operating Temperature	-10℃~55℃
Relative Humidity	≤95%
Dimensions	482.6x222.25x290mm
Weight	≤ 10Kg
Mounting Type	19" Rack Mount
Power Supply	AC100V ~240V, 50/60Hz
Power Supply Protection	Include Short Circuit, Over Voltage and Surge protection design
Power Consumption	≤ 40W
Battery Backup/Time	30minutes
MTBF	>50000hours

NMS Diagram



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