900MHz&1800MHz&2100MHz&2.4GHz Quad-band Fiber Optic Repeater

Model: Fiber Link-408(Remote 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

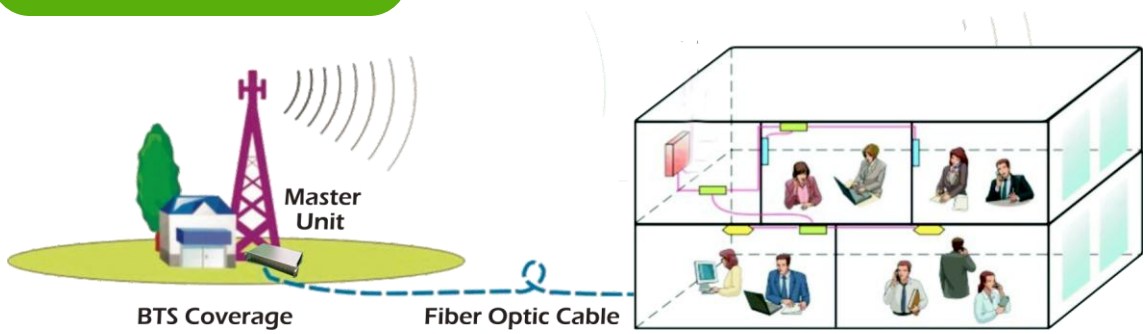
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Adopting WDM module to realize long-distance transmission
- Stable and improved signal transmission quality
- One Master Unit can support up to 8 Remote Units to maximize utilization of fiber optic cable
- RJ45 port provides 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/LAN

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, …

Application Diagram



ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw

Tone Spread
Solutions for Wireless Signal

Technical Specifications

Item		Specifications
System		LTE900&LTE1800&UMTS/LTE2100&WiFi2.4G
Working Frequency	**Uplink**	885~915MHz&1710~1775MHz&1920~1980MHz
	Downlink	930~960MHz&1805~1870MHz&2110~2170MHz&2401~2483MHz
Working Bandwidth		30MHz&65MHz&60MHz&82MHz
Frequency Stability(+/-0.01ppm)		≤0.01ppm
RMS Output Power@Bandwidth		17dBm per Band
Gain Flatness		≤±3dB for All Band
AGC/ALC Function		Support
AGC/ALC Range		10dB
Noise Figure@Max.Gain(DL/UL)		≤5dB
Group(System) Delay		≤1.5us
Ingress Protection		IP30
Cooling Function		Heat sink
Local Monitoring Interface		USB2.0
Remote Monitoring Module		Through MU via Fiber Optical Cable
Optical Connector Type		1xFC/APC
RF Connector Type		1xN-Female
Operating Temperature		-10℃~55℃
Relative Humidity		≤95%
Dimensions		318mm×265mm×113mm(TBD)
Mounting Type		Wall
Power Supply		AC100V- AC240V, 50/60Hz
Power Supply Protection		Include short circuit, Over Voltage and Surge protection
Power Consumption		≤50W
Battery Backup/Time		30minutes
MTBF		>50000hours
Software Support MU/RU Models		Same EMS support different model of MU/RU
Adjustable Parameters Function		Set and display MU and RU ID and Location, adjust the Downlink/Uplink gain, turn on/off the RF power amplifier, remote turn on/off or restart RU;
Monitored Parameters		Real-time status for downlink output power(RSSI),temperature, optical power;

ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw

Alarm Type Classification	Three levels (such as Major, Minor, and Warning)
Alarm Parameters	Real-time alarm for temperature, power supply, VSWR, etc;
Interface Remote/Local Software	Terminal software suitable for Windows 7 and the above system
EMS Server	Provide GUI interface for configuration the MU and RU, remote management each RU by MU, to set the parameters of RU, and monitoring the status and alarms

ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw