LTE1800<E2100 Dual Band Digital Fiber Optical BDA



Telecommunication Technology & Engineering Accessories

Rev.V1.1

Model: FIBER LINK 204 (DIGITAL)

The Digital Fiber Optic BDA 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 coupler, then converts it into optic signal and transmits the amplified signal to the RU via fiber optic cable. The RU 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 corrosion
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Support star, Daisy chain and hybrid connections, 1 MU can support up to 4 links, each link can support up to 8 RUs to maximize utilization of fiber optic cable
- Adopting WDM and A/D module to realize long-distance digital signal transmission
- Noise suppression function and Automatic system delay calibration function
- USB port provides a link to a notebook for local supervision or IP Based NMS(Network Management System) that can remotely supervise DAS's working status and download operational parameters to the DAS Via Ethernet or LAN.

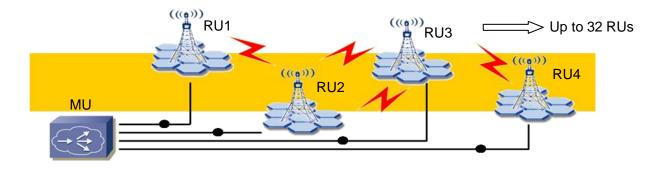
Applications

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



All specifications are subject to change without notice.

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Technical Specifications

Items		MU	RU	
		LTE1800	LTE2100	
Frequency Range	Uplink	1710MHz~ 1775MHz	1920MHz~ 1980MHz	
	Downlink	1805MHz ~1870MHz	2110MHz ~2170MHz	
Bandwidth		65MHz	60MHz	
Maximum Input Power		-10 dBm		
(Non-Destructive)		-10 05111		
Maximum RF Output Power		-10±2dBm(UL)	43±2dBm(DL)	
Maximum System Gain(Cable Access)		45±3dB(MU+RU)		
Gain Adjustment Range		1~30 dB @ Step of 1 dB		
ALC		≤2dB(When The Maximum Output Power of Repeater is Reached, Increase Input Power by 1~20dbm, Output Variation ≤2dB)		
Out of Band Gain		0.2 ≤ f_offset < 1.0MHz: ≤60dB		
		1.0 ≤ f_offset < 5.0MHz: ≤45dB		
		5.0 ≤ f_offset < 10MHz : ≤45dB		
		10MHz ≤ f_offset_CW: ≤35dB		
VSWR		≤ 1.5		
Noise Figure		≤ 5dB(Only for Uplink)		
In-band Ripple		≤±3dB		
EVM		≤ 8%		
ACLR		≤ -40dBc@±20MHz		
		≤ -45dBc@±40MHz		
System Delay		≤ 5µSec		
I/O Impedance		50Ω		
Connector	RF Connector	2xN-Female	1xN-Female	
	Optic Connector	4xLC/PC	2xFC/PC	
Fiber Optical Type		Single Mode		
Optical Receiver Sensitivity		≤-15dBm		
Temperature Range		Operation: -25°C ~ + 55°C		
Relative Humidity Range		≤ 95% (Non Condensing)		
Power Supply		AC110~220V,50/60Hz		
Power Consumption		≤ 50W	≤ 120W	
Application		Indoor(IP30)	Indoor or Outdoor(IP65)	
Dimensions		485mm X 350mm X 90mm	428mm X 328mm X 154mm	

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Website http://www.tspd.com.tw

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Weight	≤ 6kg	≤ 15kg
Local Control	Local Via USB Interface or WiFi Hotspot	
Remote Mode(Optional)	Cloud Network Management System Via 4G Wireless Modem and RJ45 Port	
NMS Function(Optional)	Real-time Alarm for Door Status, Temperature, Power Supply, VSWR, etc; Remote Control Such as Turn On/Off, Increasing/Decreasing Output Power etc; Real-time Status for Output/Input Power, UL/DL Gain, All Status of BDA etc.	

E-mail: sales@tspd.com.tw