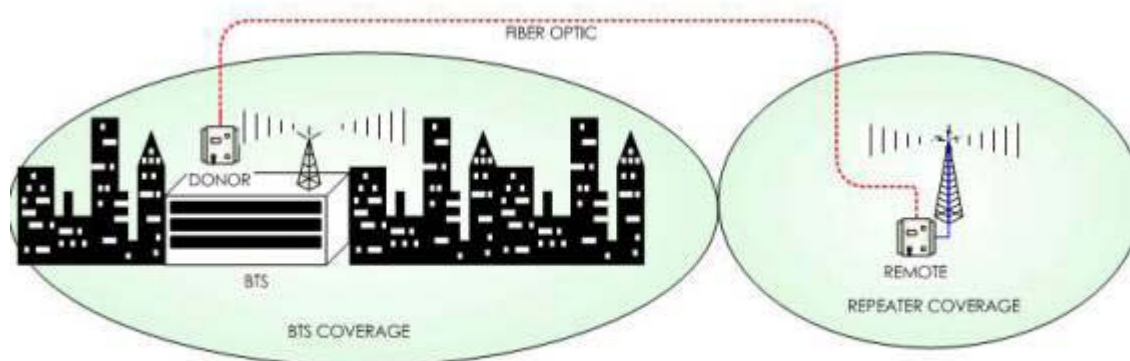


CDMA 800MHz TM-AR-800F Series Fiber Optic Repeater

Description

Repeater is to provide radio coverage in a flexible and efficient way. Among the things with reference to the design it can be difficult to spread coverage all the way into side isles, narrow hallways, and several statuses, combined with different building materials. Moreover, if there are many people constantly moving, for instance in shopping malls, and the demand for coverage varies from one spot to another as well as during the day and during the week, satisfying the growing demand for capacity becomes a challenge. The same status can be occurred in some villa group, Subway, Speedway, etc. So the repeater can gives you the optimal solution.

Application : In-building, Subway stations, Basement, Tunnels, Shopping malls, Speedway, Underground parking etc.



FIBER OPTIC REPEATER SYSTEM

Fiber optic repeater system consists of two; Donor and Remote. Donor is installed in BTS and Remote is installed in remote cell site. Donor captures RF signal and convert it into optic signal and transmit it to Remote via fiber optic cable. Remote reconverts the optic signal into RF signal and amplifies it by HPA. Fiber optic repeater is usually used outdoor since its output power is high.

In CDMA/TDMA/GSM system, linearity of HPA, regular gain and raffle are highly required. This Fiber optic is used the most frequently because of its performance and reliability in spite of higher cost than others.



Microwave repeater system consists of two repeaters; Donor and Remote. Donor which is located within BTS cell site converts RF signal from the BTS and transmits it to Remote. This system is idealistic for the areas which don't allow fiber optic or coaxial cable such as island or near highway. It costs a little higher than other systems but it is worth it because it has wide range of installation location.

CDMA 800MHz TM-AR-800F Series Fiber Optic Repeater

Features

- Maximum transmission distance 20Km by optical fiber cable.
- Avoid co-frequency interference, omni directional coverage is possible, easy to expand and maintain
- Unlimited to the geography condition, especially applicable to remote towns and complex mountain regions.
- Stable performance, sound coverage effect.
- Improved system noise figure and sensitivity, provides wider coverage
- High gain linear power amplifier technique ,excellent intermodulation and spurious emissions
- High out band rejection, with reliable performance
- Lightning proof and high-voltage-proof
- Compact design, water-resistant, weather-proof and antisepticise



Specification and Technical Information

Item Number		TM-AR-800F-D	TM-AR-800F-R05	TM-AR-800F-R10	TM-AR-800F-R20	
Optical Specification	Wave Length	1.31um or 1.55um				
	Output Power	Min 0dBm				
	Fiber Type	G652				
	Fiber Connector	FC/PC				
	Sensitivity	Max -13dBm (C/N=20dB)				
	Time Delay	Max 5us/km				
Electronic Specification	Freq Range	Uplink	825-835MHz			
		Downlink	870-880MHz			
	Output Power	Uplink	Min 30dBm(wireless), Min -10dBm (coupling)			
		Downlink	-	Min 37dBm	Min 40dBm	Min 43dBm
	Gain	Uplink	Min 85dB(wireless), Min 60dB(coupling)			
		Downlink	Min 90dB(wireless), Min 60dB(coupling)			
		AGC control range	Min 20dB (+/- 2dB)			
		Gain control range	31dB (1dB Step)			
	Ripple in band		Max +1.5dB			
	Intermodulation in band		Max -15dBm@30kHz			
	Spurious Emissions	9kHz-1GHz	Max -36dBm/30kHz			
		1GHz-12.75GHz	Max -30dBm/30kHz			
	Out band Rejection	Uplink	Min 1.98MHz; Max -54dBc/30kHz			
		Downlink	Min 1.98MHz; Max -60dBc/30kHz			
	Waveform Quality	Uplink	p>0.960			
		Downlink	p>0.950			
Input/Output Impedance		50Ω				
Noise Figure		Max 5dB				
VSWR		Max 1.4				
Group time delay		Max 5us				
Others	Environmental Temperature	-30 - +55 degree C				
	Relative Humidity	Max 95%				
	Power Type	AC220V or DC-48V (coupling)		AC220V / 45-55Hz		
	Power Consumption	Max 75w	Max 100w	Max 120w	Max 150w	
	RF Connector	N-F				
	Dimension	450x300x60		620x400x200		