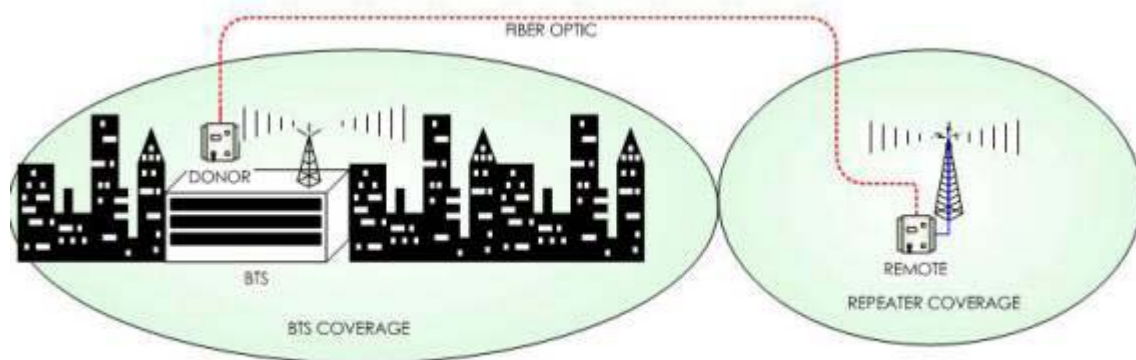


## GSM 900MHz TM-AR-900B Series Wireless Broadband Repeater

### 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.

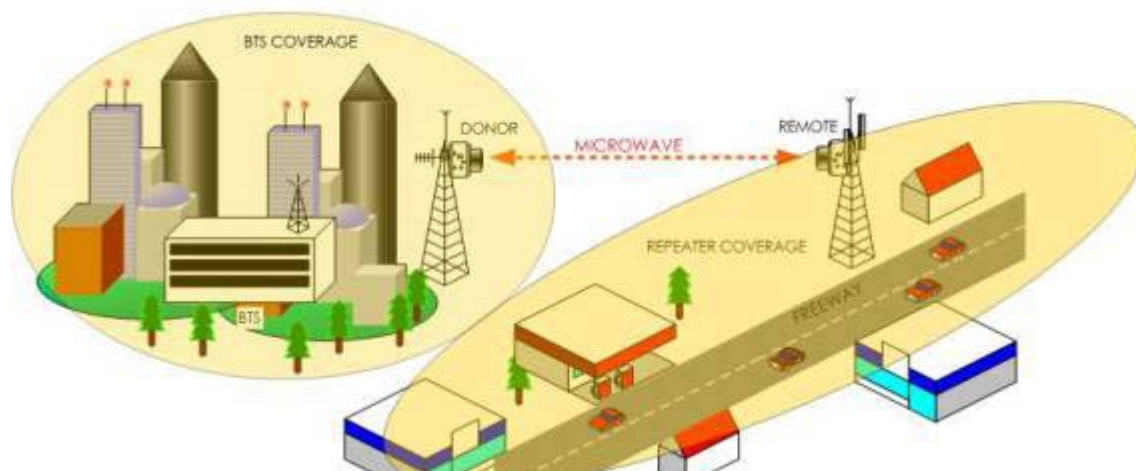
Application : In-building, Subway stations, Basement, Tunnels, Shopping malls, Speedway, Underground parking etc.



**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.

## GSM 900MHz TM-AR-900B Series Wireless Broadband Repeater

### Features

- Improved system noise figure and sensitivity, provides wider coverage
- High out band rejection, excellent intermodulation and spurious emissions
- High gain linear power amplifier technique, with reliable performance
- Easy to expand and maintain
- Lightning proof and high-voltage-proof
- Compact design, water-resistant, weather-proof and antisepticise
- Applicable to large coverage area such as highway, town and tunnel etc.



### Specification and Technical Information

Item Number		TM-AR-900B-20	TM-AR-900B-10	TM-AR-900B-05
Freq Range	Uplink	890-909MHz or 909MHz-915MHz		
	Downlink	935-954MHz or 954MHz-960MHz		
Ripple in band		Max +/- 1.5dB		
Gain	Uplink	Min 85dB		
	Downlink	Min 95dB		
AGC control range		Min 40dB (+/- 2dB)		
Gain control range		31dB (1dB Step)		
Output Power	Uplink	Min 30dBm	Min 30dBm	Min 30dBm
	Downlink	Min 43dBm	Min 40dBm	Min 37dBm
IMD3	Uplink	Max -45dBc@30dBm		
	Downlink	Max -45dBc@43dBm	Max -45dBc@40dBm	Max -45dBc@37dBm
Spurious Emissions	9kHz-1Ghz	Max -36dBm		
	1GHz-12.75GHz	Max -30dBm		
Out of band Gain	Fc-400kHz	Max 50dB		
	Fc-600kHz	Max 40dB		
	Fc-1MHz	Max 35dB		
	Fc-5MHz	Max 25dB		
Input/Output Impedance		50 ohm		
Noise Figure		Max 5dB		
VSWR		Max 1.4		
Group time delay		Max 5us		
Environmental Temperature		-30 - 55 degree C		
Relative Humidity		Max 95%		
Power Type		AC220V / 45-55Hz		
Power Consumption		150w	140w	130w
RF Connector		N-F		
Dimension		620x400x200		