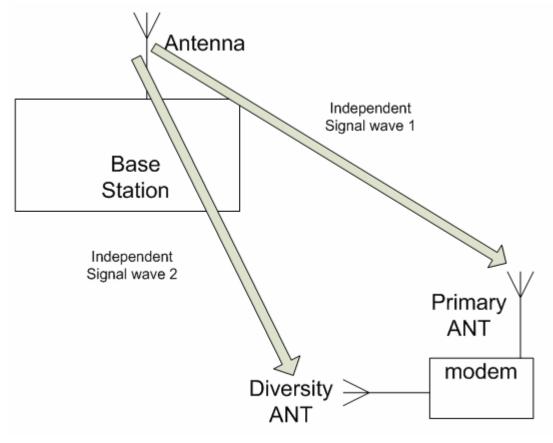
The external antenna port is used to connect MIMO (Multi Input Multi Output) antenna. MIMO mode only used to improve HSDPA data rate (From 21Mbps to 28Mbps). MIMO antenna is not able to transmit power. It only used received power. MIMO is different from Diversity. The difference is as following:

## 1. Diversity Mode:

Like the Fig 1, Diversity Antenna and Primary Antenna received the independent signal. Because Base Station only has one Antenna for transmitting signal, the independent signal contained the same information. Modem can use any one of these signal waves to demodulate.



## **Fig 1 Diversity Mode**

## 2. MIMO mode:

Like the Fig 2, MIMO Antenna and Primary Antenna received the dependent signal. Because Base Station has two independent Antennas for transmitting signal, the signal contained different information. Modem can not use any one of these signal waves to demodulate. Modem must use two signal waves to demodulate.

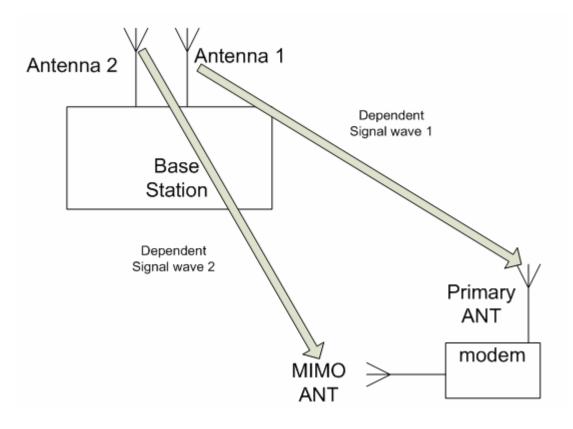


Fig 2 MIMO mode