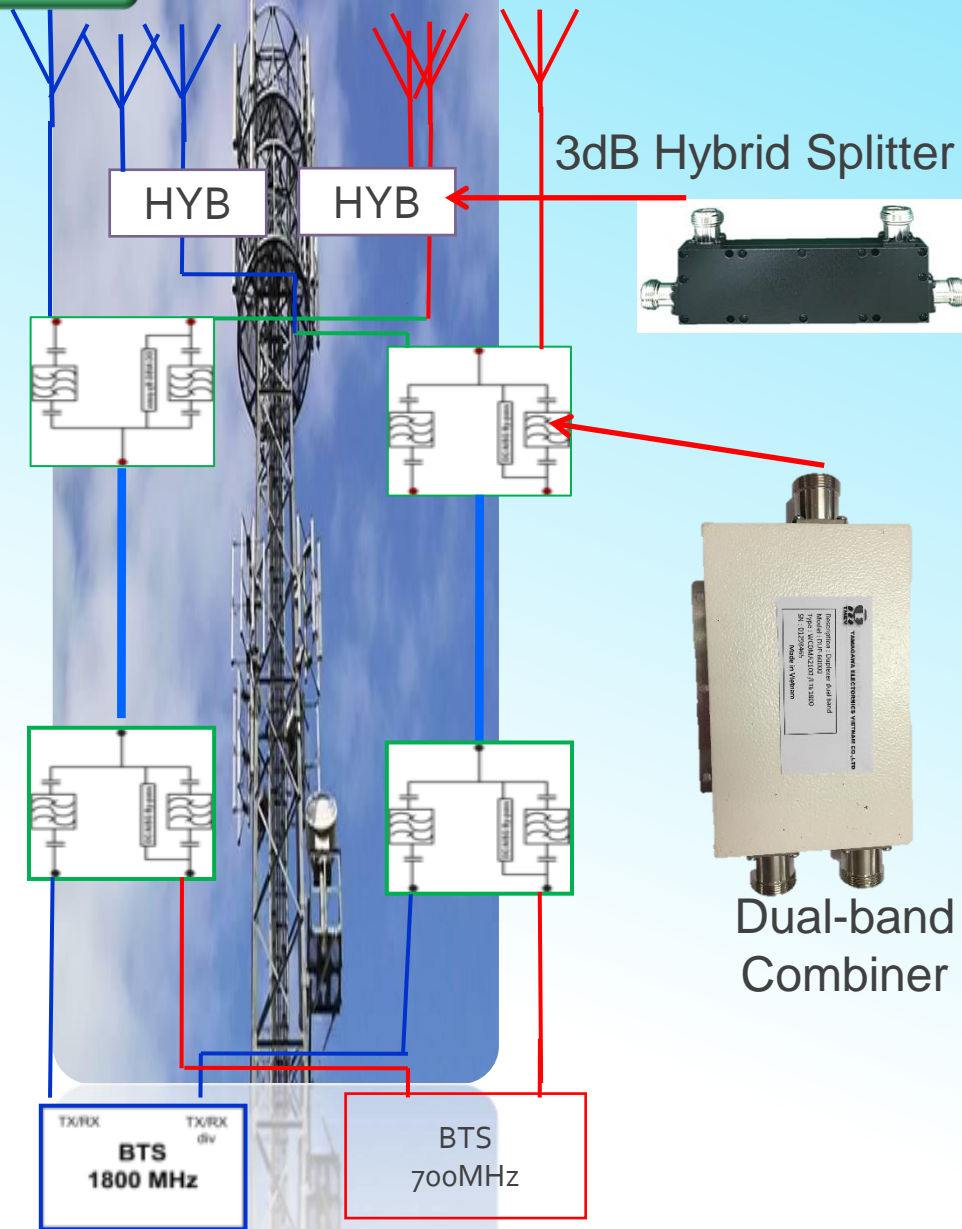




# BTS Product Solution

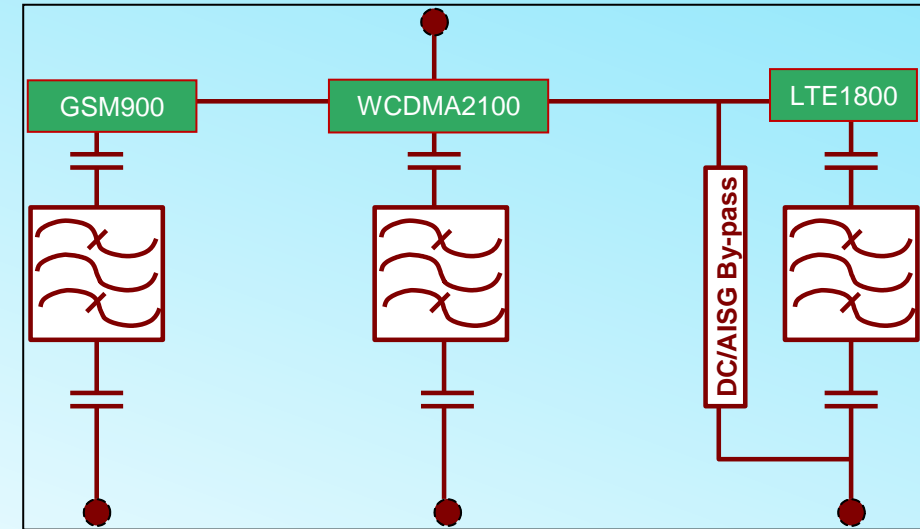
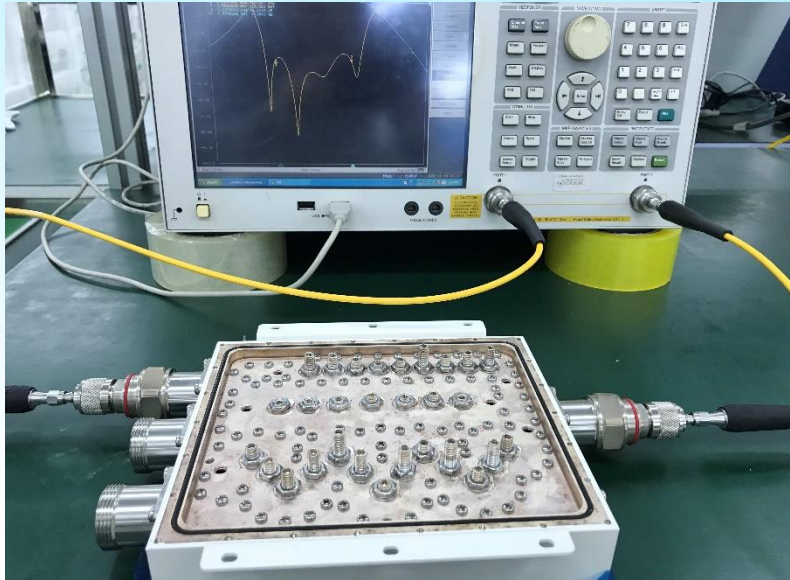


## LTE 700, LTE1800 Dual Band Architecture

- Designed for 4GLTE purpose
- DC/AISG through functions
- 7/16 DIN connectors
- Low PIM
- Low insertion loss



Dual-band Combiner



- Available as **a single unit** or for Antennas as **double unit**
- Built in **lightning protection**
- **DC/AISG** through **functions**
- Inter-modulation products **better than -160 dBc (3<sup>rd</sup> order; with 2x 43dBm)**

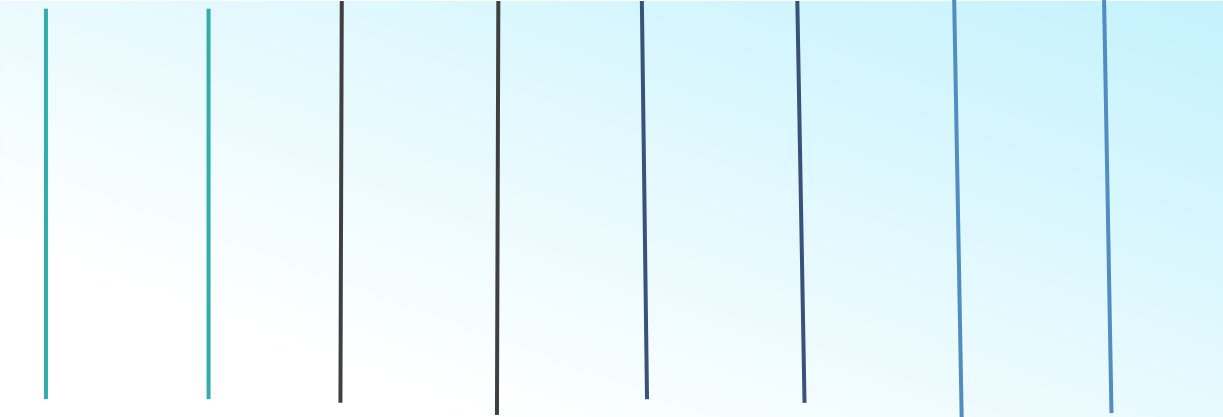


TNEV

# CURRENT NETWORK



Triple Band antenna 1800-2100-2600mhz 8 port



1.8GHz LTE RRH  
BOTH 2\*2MIMO



1.8 GHz  
WCDMA  
RRH



2.1 GHz  
WCDMA  
RRH



2.6 GHz LTE  
RRH

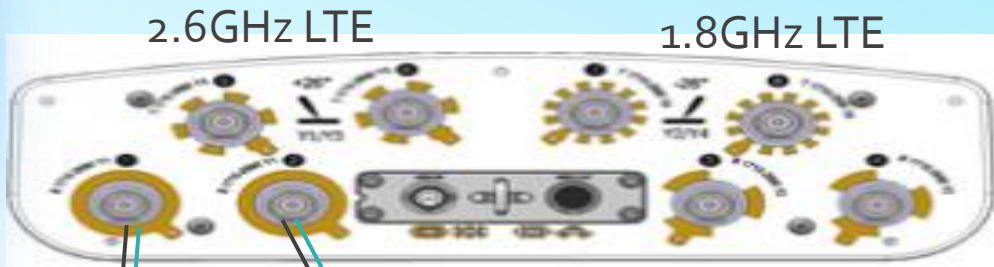
### Disadvantage :

- ❖ No more port for L2.6 in future
- ❖ Have to install 3 more antenna 2600Mhz if upgrade
- ❖ This will made more tower load, wind load and look not neat.
- ❖ MIMO 2 x 2 only



# Model A

## ANTENNA: 8 ports Antenna



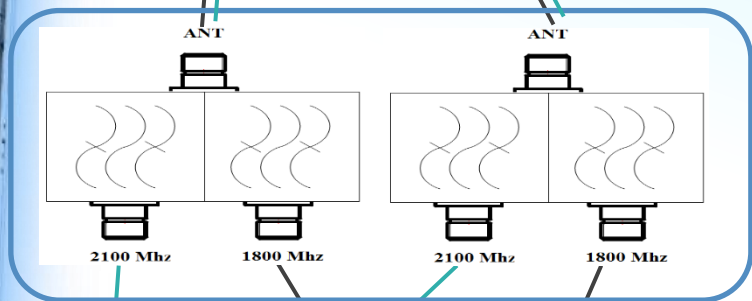
- 1.8/2.1GHz 4inputs  
2output (Dual combiner)

### Benefit : when upgrade to L2.6

- Saving 3 antenna for 3 Cell
- Low wind load
- Tower load decrease

1.8GHz DCS / 2.1GHz WCDMA

1.8GHz LTE



■ 1.8GHz LTE 4\*4MIMO

■ 2.6GHz LTE 2\*2MIMO

FREQUENCY	PIMD	INSERTION LOSS
1710~ 1880MHz and 1920~ 2170MHz	-160dBc +43dBm* 2 input	0.4~ 0.5dB



■ 2.1GHz W-CDMA TRX/RX/ 1.8GHz WCDMA TX/RX RRH



# Dual combiner specifications

PRODUCT S	FREQUENCY PORT 1	FREQUENCY PORT 2	Insertion loss	Isolation	PIM	Connectors	Ports
1.8/2.1GHz DUPLEXER	1710-1880MHz	1920-2170MHz	0.5dB	50dB	-16dBc +43dBm x2	7/16 DIN or 4.3-10 DIN -F	4 inputs 2 outputs or 2 inputs 1output
1.8/2.6GHz DUPLEXER	1710-2170MHz	2500-2690MHz	0.4dB	50dB	-16dBc +43dBm x2	7/16 DIN or 4.3-10 DIN -F	4inputs 2outputs or 2inputs 1output

■ 2inputs 1output



■ 4inputs 2outputs





# 5MHz Separation duplexer between DL and UL



## Feature

- 800MHz 5MHz separation duplexer (50dB isolation)
- DL875MHz/ UL880MHz BAND for Asian operator
- We designed and manufacture narrow separation band between DL and UL signal.

