

PART NO. : WV-1821DT-TMA-01

◆ APPLICATION

> For DCS1800 & WCDMA Band System Base Station

◆ FEATURE

> High Reliability

> **RoHS Compliance**

◆ ELECTRICAL SPECIFICATION

ITEM	SPECIFICATION
Downlink(Tx)	
Frequency Range	1805MHz ~ 1880MHz
Return Loss, All Ports	18.0dB Min
Insertion Loss	0.5dB Typical
Ripple	0.3dB Typical
Power Handling(operational)	53dBm
Power Handling(survival)	57dBm
Intermodulation	-110dBm Max, 2-Tone 43dBm carriers, in the Downlink band
Uplink(Rx)	
Frequency Range	1710MHz ~ 1785MHz
Gain	14dB
Insertion Loss(Bypass mode)	3.0dB Typical
Return Loss, All Ports	18dB Min
Return Loss, All Ports(Bypass mode)	12dB Min
Noise Figure	1.5dB Typical
OIP3	26dBm Typical
Max Input Power	+12dBm
Power Supply Voltage	12V
Power Consumption	1.5W Max per LNA
Current Alarm Mode	Current alarm compatible with PDU
Lightning Protection ANT Port	DC Ground
Lightning Protection BTS Port	8/20us 10kA
Input/Output Impedance	50 Ohm nominal

◆ ELECTRICAL SPECIFICATION

ITEM	Specification
UMTS-Uplink	
Frequency Range	1920MHz ~ 1980MHz
Return Loss	18dB Min 14dB Min (Bypass mode)
Nominal Gain	12dB to 14dB ± 1.0 dB
Passband Ripple	0.6dB Typical, 1.0dB Max
Noise Figure	1.5dB Typical
Tx-Band Rejection, relative to gain level	80dB Min
Output 3 rd order intercept point(IP3)	+ 25dBm Typical, + 22dBm Min
Insertion Loss bypass mode	1.8dB Typical
Supply voltage, fed via the RF Cable	12V DC nominal @120mA(8-31V DC)
Total Group Delay	150nS Max
UMTS-Downlink	
Frequency Range	2110MHz ~ 2170MHz
Insertion Loss	0.5dB Typical
Return Loss	18.0dB Min
Rx-Rejection	60dB Min
Average Operating Power	+ 53dBm(200W) Max
Power Handling Survival	+ 57dBm(500W) Max
3 rd Order PIM in TX Band @ BTS Port	-120dBm @ 43dBm 2 Tone
Input/Output Impedance	50 Ohm nominal

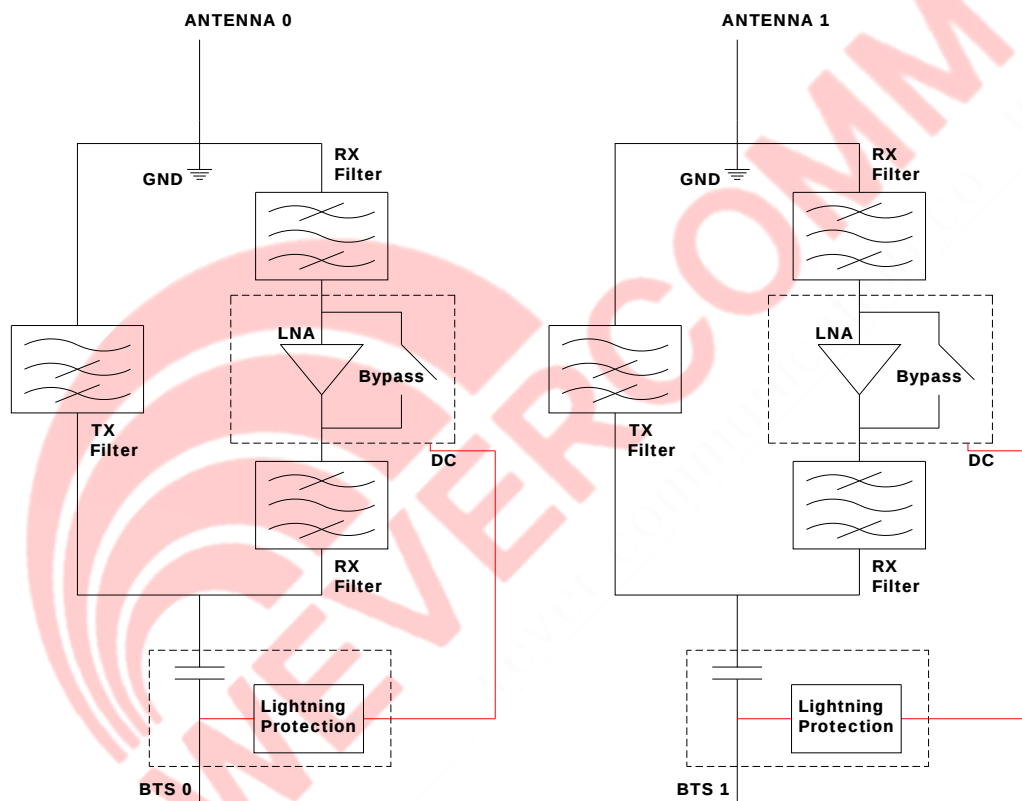
◆ ENVIRONMENTAL SPECIFICATIONS

ITEM	SPECIFICATION
Operating Temperature Range	-40°C to +65°C
Ingress Protection	IP-67
Humidity	100 %

MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION
Dimension	250.0 x 160.0 x 150.0 (Unit:mm)
Weight	Around 10.0Kg
RF Connector	7/16 DIN Female Connector
Clamp	6inch-2EA
Grounding Cable	AWG8, Length 3M

BLOCK DIAGRAM



◆ OUTLINE DRAWING

