

DUAL BAND COMBINER

PART NO. : WV-DBC-0809-3D-01

◆ APPLICATION

- > Integrates Wireless Bands(790MHz~862MHz,880MHz~960MHz)
- > Designs for Co-siting systems
- > Outdoor Application

◆ FEATURE

- > High Reliability
- > **RoHS Compliant**
- > IP68-classified

◆ ELECTRICAL SPECIFICATION

ITEM	SPECIFICATION	
	PORT A 800	PORT B 900
Frequency Range	790MHz ~ 862MHz	880MHz ~ 960MHz
Bandwidth	72MHz	80MHz
Insertion Loss	0.4dB Max @ Port A to E & Port B to E	
VSWR	1.2:1 Max	
PIMD1	3rd Order Intermodulation Products < -160dBc. Filter location: Site room Input frequencies: 800 MHz, 900 MHz Requirements shall be fulfilled for all possible combinations of frequencies, carrier types and input powers according to Table 1 below.	
PIMD2	3rd Order Intermodulation Products < -160dBc. Filter location: Antenna/feeder Input frequencies: 800 MHz, 900 MHz Requirements shall be fulfilled for all possible combinations of frequencies, carrier types and input powers according to Table 2 below.	
Isolation	70dB Min @ (Port A to B)	
Power	Maximum Power Port A > 80W (at 50° C ambient temperature) Maximum Power Port B > 100W (at 50° C ambient temperature) Maximum Power per Unit > 180W (at 50° C ambient temperature)	
DC Pass	All Path	
Surge Protection	10kA using 8/20us pulse	
In/Out Impedance	50 Ohms Nominal	

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Frequency	Port	RAT	# carriers	Input power per frequency (Watt)	System IM2 level (dBc) - Guaranteed	System IM2 level (dBc) - Typical	System IM3 level (dBc) - Guaranteed	System IM3 level (dBc) - Typical
800 MHz	A	LTE	1x10 MHz	60	-	-	150 @2tone- 20W Input	160 @2tone- 20W Input
900 MHz	B	LTE+GSM	1x10 MHz + 2	30 + 2x20 = 70				

Table 1. Diplexer 800/900 - Site room

Frequency	Port	RAT	# carriers	Input power per frequency (Watt)	System IM2 level (dBc) - Guaranteed	System IM2 level (dBc) - Typical	System IM3 level (dBc) - Guaranteed	System IM3 level (dBc) - Typical
800 MHz	A	LTE	1x10 MHz	40	-	-	150 @2tone- 20W Input	160 @2tone- 20W Input
900 MHz	B	LTE+GSM	1x10 MHz + 2	30 + 2x20 = 70				

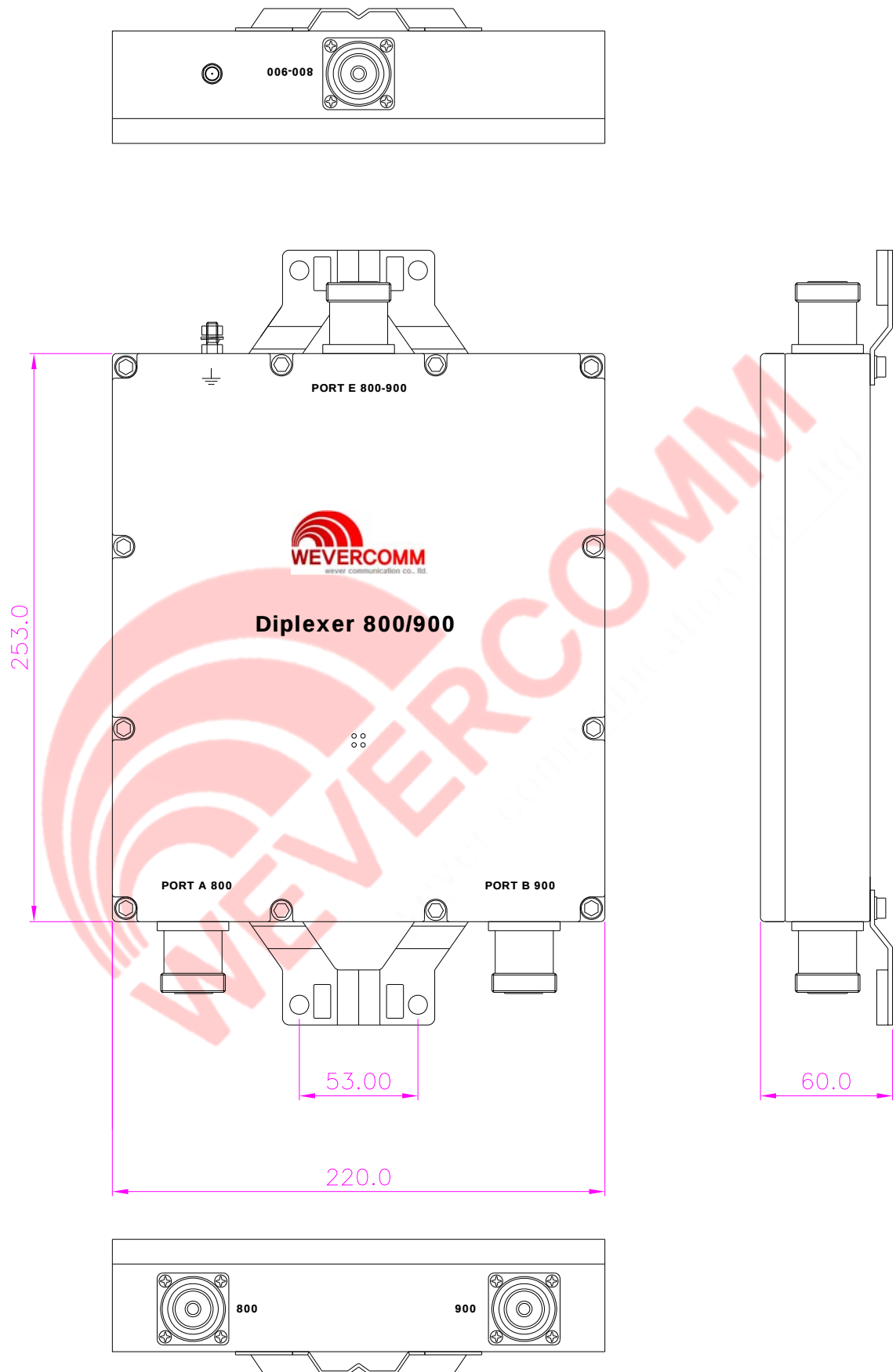
Table 2. Diplexer 800/900 - Antenna/RRU/Feeder

◆ MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION
Dimension	248.0 x 263.0 x 60.0 Max (unit:mm)
Mounting Points	Wall or Pole
RF Connector	7/16 DIN Female Long Neck Connector
Connector Position	See Outline Drawing
Weight	Single : Apprx. 4.6Kgs. Double : 9.2Kgs.
Finish	Gray color epoxy coating

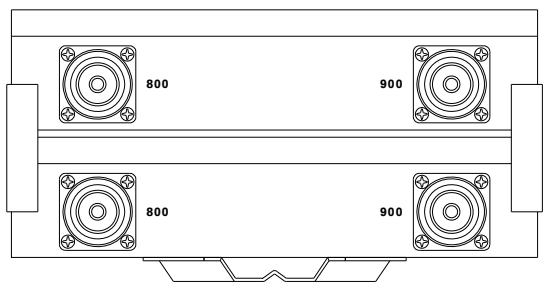
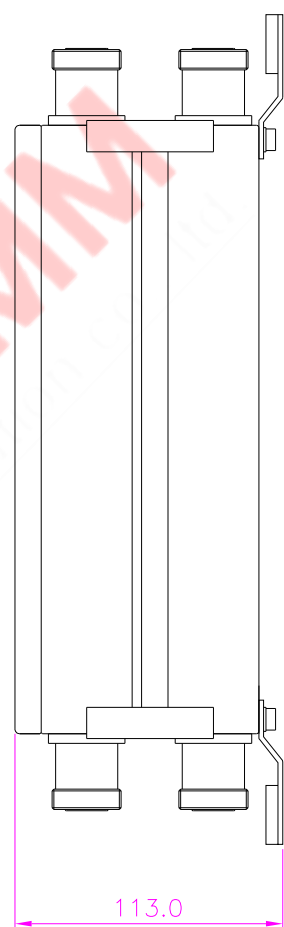
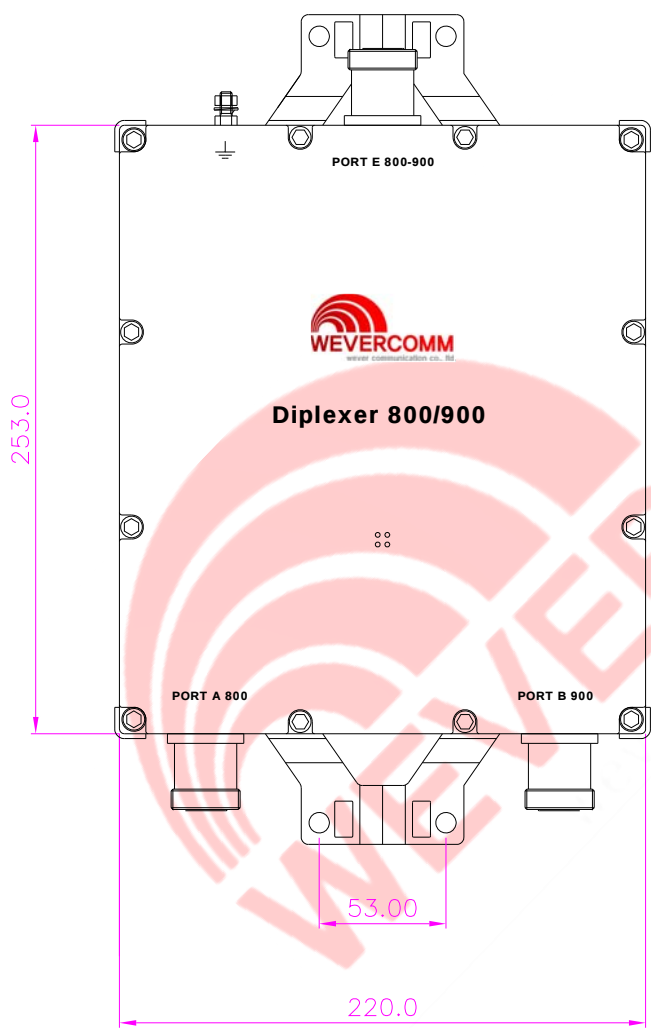
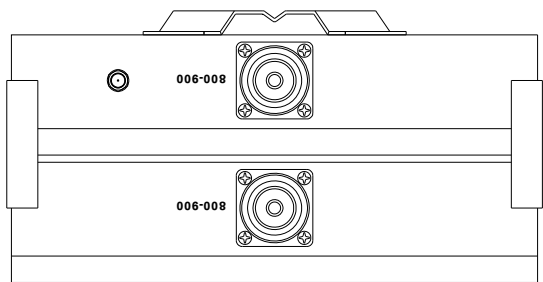
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◆ OUTLINE DRAWING



SINGLE (Part No. : WV-DBC-0809-3D-01-S)

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DOUBLE (Part No. : WV-DBC-0809-3D-01-D)