

## DBC-A-P-4SF

*Dual-band combiner*

*1900/AWS*

*DC/AISG sensing*

*Quad unit*

*4.3-10 connectors*



**nwav**  
technology

- Very low insertion loss and high isolation for optimized system performance
- Compact size and light weight for minimum site impact and lowest lease costs
- Automatic DC sense for easy installation and site evolution
- Industry-leading connector technology for lasting performance
- Compatible with JMA WPS weatherproofing solution

### Electrical specification

Passband	1900 passband	AWS passband	
Frequency, MHz	1850 - 1995	uplink 1695 - 1780	downlink 2110 - 2200
Insertion loss, dB avg.	0.25		
Insertion loss, dB max.	0.35		
Return loss, dB min.	22		
Isolation to other bands, dB	60		
Average input power, W max.	250	n/a	250
Input peak envelope power (PEP), W max.	3000	n/a	3000
PIM 2x +43 dBm, dBc min.	-156		

### Environmental specifications

Environmental rating	ETSI EN 300 019 class 4.1, RoHS
Ingress protection	IP67, unmated
Temperature range, °C	-40 to +65
Temperature range, °F	-40 to +149
Wind force @ 200 km/h (125 mph) front/side, lbf	13.42 / 13.9
Lightning protection all ports	RF port: ±10kA max. (8/20us), IEC 61000-4-5
Altitude	3,000 m max.   10,000 ft. max.
Mean time between failures (MTBF)	>10 <sup>6</sup>

**DC sense and routing specifications**

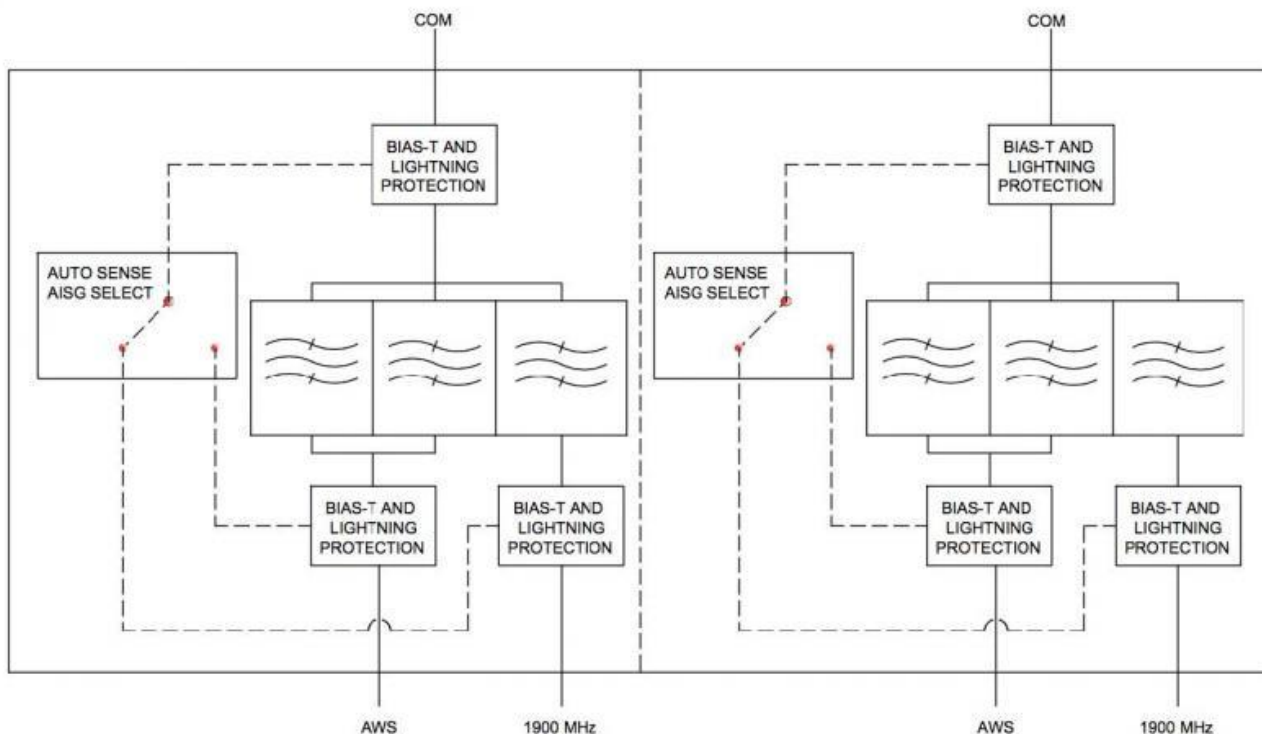
Input voltage, DCV max.	35
DC current rating amps	1.5, current limited
Compatibility AISG	1.1/2.0

**Diplexer on bottom (combiner)**

DC on AWS or PCS port	DC-AISG connected to COM
Both ports with DC detected	DC-AISG connected from AWS to COM

**Diplexer on top (splitter)**

DC on COM detected	DC-AISG routed to port with an AISG Device
If more than one port has an AISG device	One port is selected. See <i>Port priority</i> below
Port priority (multiple AISG devices detected)	P1: AWS P2: PCS

*Twin block diagram (2x in -4SF)*

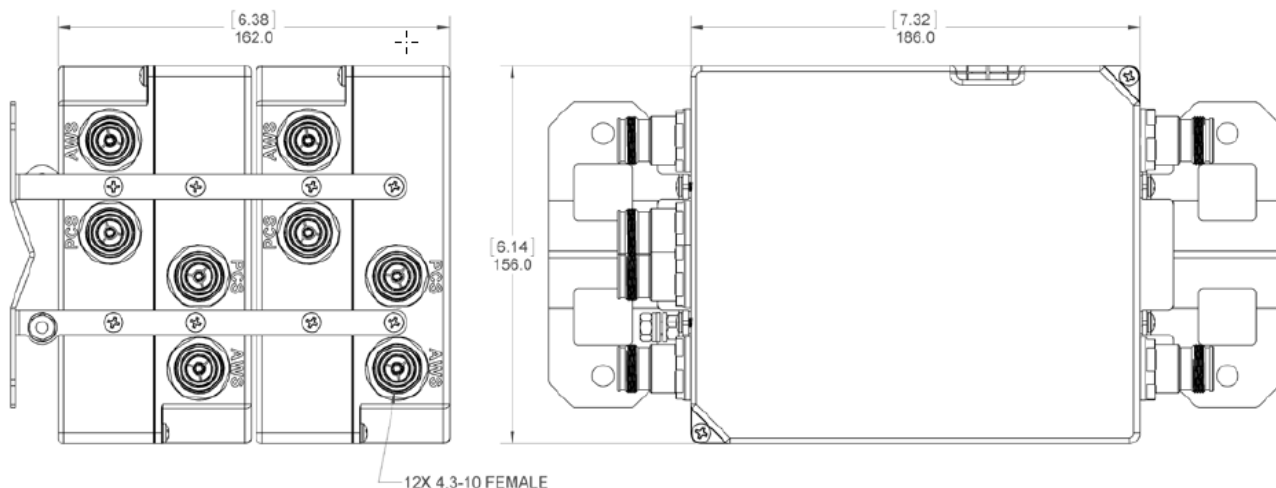
## DBC-A-P-4SF

NWA<sup>TM</sup> Dual-Band Combiner

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## Mechanical specifications

Connectors RF	4.3-10 (F)
Ground stud	M6 x 1 (hex nut included)
Connectors quantity	12
Dimensions, excluding brackets and connectors L x W x H mm (in.)	186 x 156 x 162 (7.32 x 6.14 x 6.4)
Weight: kg (lbs.)	6.9 (15.2)
Mounting	Pole/wall bracket supplied, including two metal clamps for 45-178 mm diameter poles



## Ordering information

DBC-A-P-4SF	2B combiner AWS/PCS, DC sense, Quad
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## RF sweep plots

PCS

AWS

