



## PRODUCT DATA SHEET

D8421

**Werlatone® Mismatch Tolerant®** High Power Broadband RF Combiners and Dividers will operate into High Load VSWR Conditions, for extended periods, without damage. With extensive experience as a supplier to military platforms worldwide **Werlatone®** designs its High Power Broadband Combiners, Power Dividers, and N-Way Combiners for proper operation in the most stringent operating conditions.

### Features:

High Power      Wide Bandwidths      Small Size      High Isolation      Custom Designs Available

### Electrical Specifications:

Frequency:	1.5 - 30 MHz
Power:	12,000 W CW
Insertion Loss:	0.3 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	± 5° Max.
Amplitude Balance:	0.2 dB Max.
Isolation:	20 dB Min.

### Mechanical Specifications:

Type:	Connectorized
Material:	Aluminum 6061-T6
Surface Finish:	Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite) RoHS Compliant Available
Operating Temperature:	-55°C to +75°C
Storage Temperature:	-60°C to +85°C
Weight:	68.0 lbs. (-80)
Size:	19.5 x 22.5 x 8.75"

### Connector Configurations:

Model	J1-J8	J9-J10	J11	J12	J13
D8421-80	N Female	SMA Female	1 5/8 EIA	9 Pin D-Sub Conn.	MS3122E12-3P FAN PWR 220 VAC

**When specified, Werlatone® High Power Combiners and RF Dividers** will tolerate full input failures on adjacent port(s). This insures that remaining transmitter(s) may continue to operate until the amplifier system can be properly shut down for maintenance. Choose your specific connector configuration from a list of options. Additional connector configurations for our High Power RF Combiners/Dividers, Non-Coherent Combiners, and N-Way Combiners are available upon request.

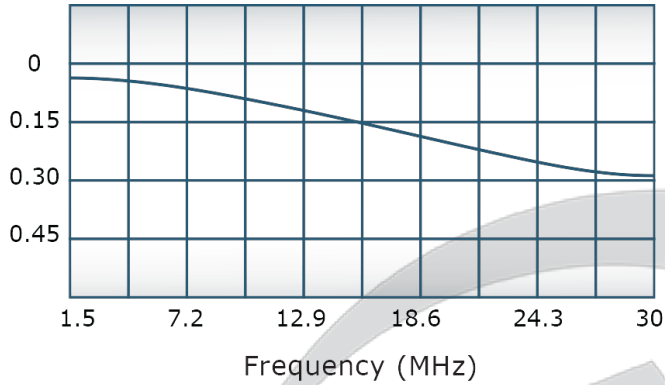
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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

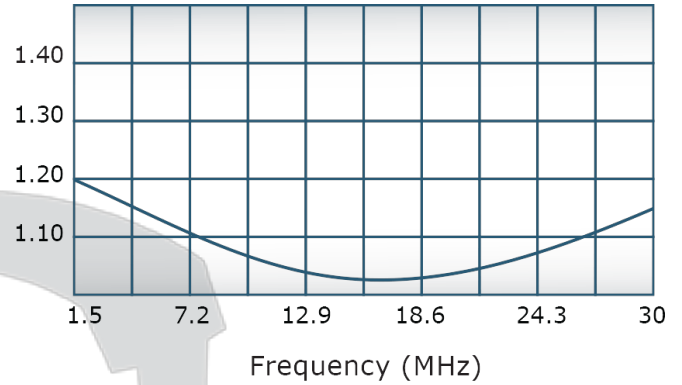


## Performance Data (Specifications subject to change without notice):

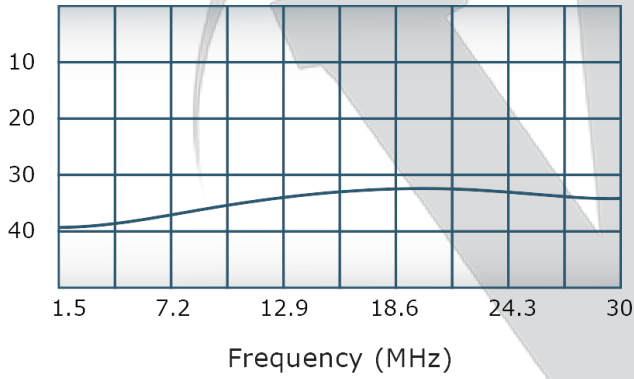
Insertion Loss:



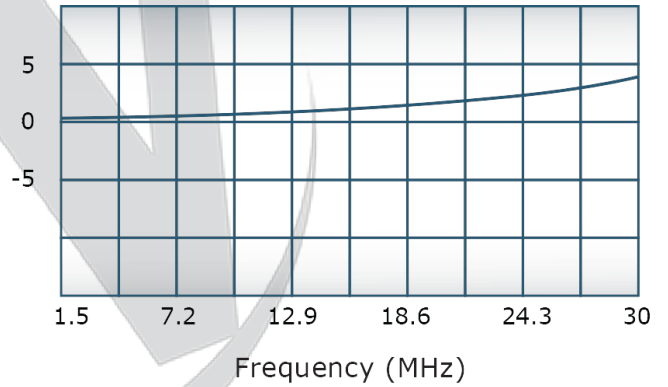
VSWR:



Isolation:



Phase Balance:



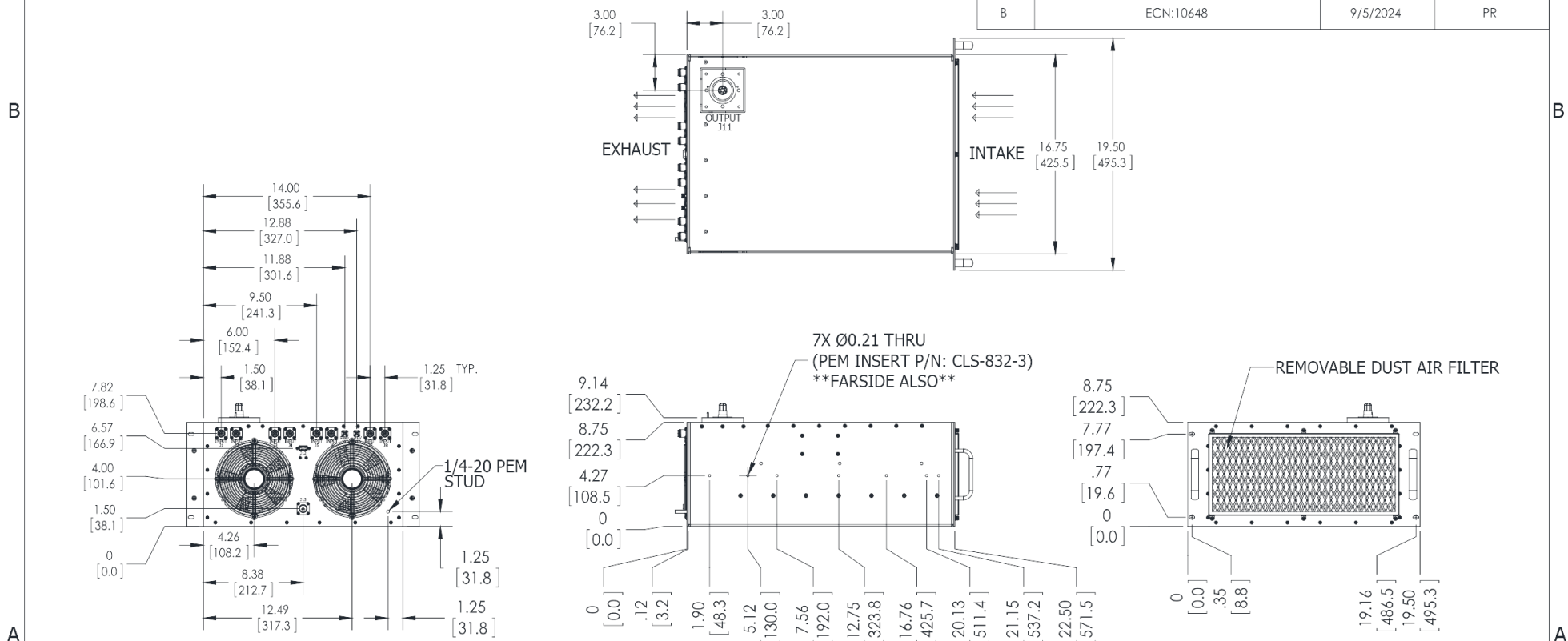
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/10/2014	SC
B	ECN:10648	9/5/2024	PR



- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM**
  - SURFACE FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
  - CONNECTORS: J1-J8: N FEMALE**

- J9-J10: SMA FEMALE (COUPLER OPTIONAL)**
- J11: 1 5/8 EIA**
- J12: 9 PIN D-SUB CONN.**
- J13: MS3122E12-3P FAN PWR 220 VAC**
- PIN A (NEUTRAL), PIN B (GND)**
- PIN C (HOT)**

- 9 PIN D-SUB PIN CONFIGURATION**
- PIN 3 - 10K THERMISTOR 1 (+) (J1-12)
  - PIN 4 - 10K THERMISTOR 2 (+) (J3-14)
  - PIN 5 - 10K THERMISTOR 3 (+) (J5-16)
  - PIN 6 - 10K THERMISTOR 4 (+) (J7-18)
  - PIN 7 - ALL THERMISTORS (-)
  - PIN 9 - CHASSIS GND

UNLESS OTHERWISE SPECIFIED		OWN	DATE	<b>WERLATONE SINCE 1965</b> 17 Jon Barrett Rd Patterson, NY 12563
• INTERPRET DRAWING 3400 MIL-STD-100 • DIMENSIONS FOR ASME Y14.5M-2009 • PARENTHETICAL INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES (mm) • DIMENSIONAL LIMITS APPLY UNLESS OTHERWISE SPECIFIED • TOLERANCES: ANGLES = ±° 3 PL ± .005 (13) 2 PL ± .015 (30) • REMOVE ALL BURRS AND SHARP EDGES R.01 MAX • CONCENTRICITY MACHINED DIA-.002 FIM • MACHINE TOOL FINISHING-.003 FIM		CHK	DATE	
D8421-AC		ENGR	DATE	TITLE
D8309-AC		BW	DATE	<b>OUTLINE</b>
NEXT ASSY USED ON		MFR	DATE	SIZE CAGE CODE DWG NO
APPLICATION		QA	DATE	B 28812 21143-500
THIRD ANGLE PROJECTION		RLSE	DATE	REV
				B
				SCALE 1:8 SHEET 1 OF 1

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