

PRODUCT DATA SHEET
Private: 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: 0.5 dB Max.
VSWR: 1.30:1 Max.
Phase Balance: $\pm 5^\circ$ 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.

Performance Data (Specifications subject to change without notice):

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

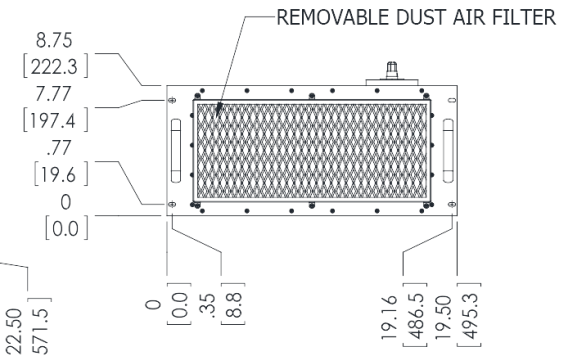
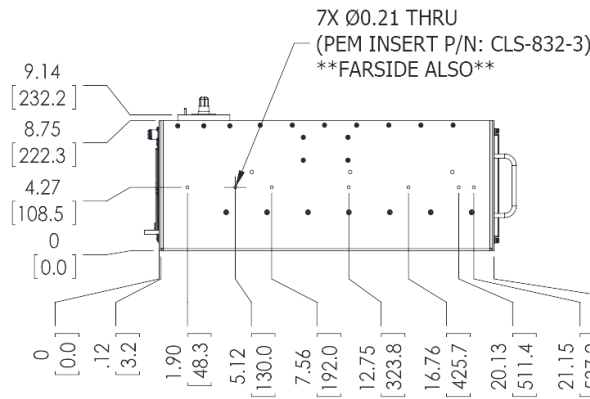
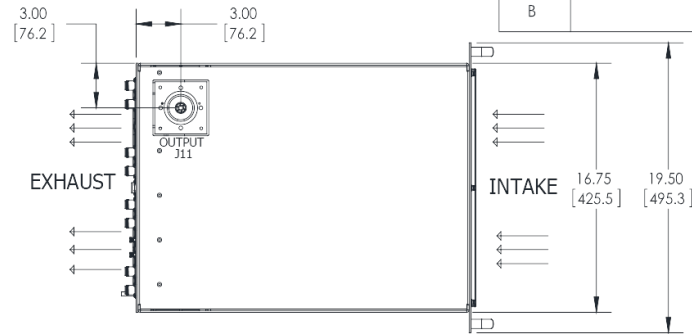
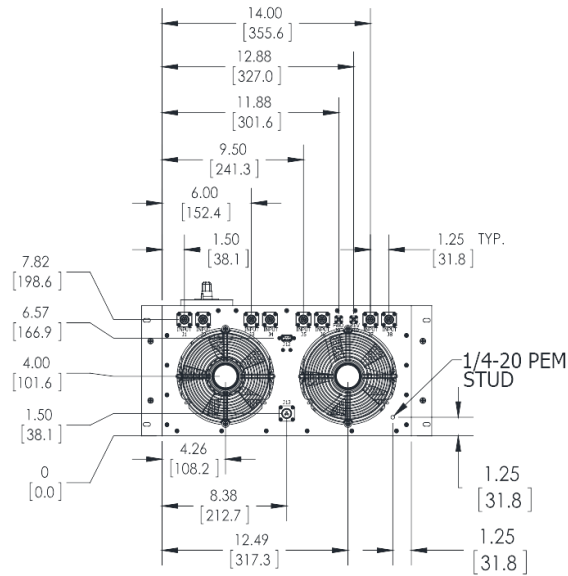
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

RESTRICTION ON USE, DUPLICATION OR
DISCLOSURE OF PROPRIETARY INFORMATION
This document contains proprietary information
which is the sole property of Werlatone, Inc.

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

B

A



NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM
2. SURFACE FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)
3. 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	17 Jon Barrett Rd Patterson, NY 12563	
• INTERPRET DRAWING (AW) MIL-STD-100	SC	2/10/2014	DATE	CHK	DATE	TITLE OUTLINE	
• DIMENSIONS PER ASME Y14.5M-2009	PR	2/10/2014	DATE	ENGR	DATE		
• DIMENSIONS ARE IN INCHES (mm)	BW	2/10/2014	DATE	INFR	DATE		
• DIMENSIONS UNLESS OTHERWISE SPECIFIED	QA	DATE	DATE	DATE	DATE		
• TOLERANCES:	DATE	DATE	DATE	DATE	DATE	SCALE	SHEET 1 OF 1
• ANGLES = 2°							
• 3 PL ± .005 (13)							
• 2 PL ± .013 (30)							
• REMOVE ALL BURRS AND SHARP EDGES R.01 MAX							
• CONCENTRICITY MACHINED DIA. .002 FPM							
• MACHINE TOOL FINISH .003 FPM							

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com