



Electron Devices

PRELIMINARY

M1245 Microwave Power Module

Features

- 6.5 to 18 GHz
- 200 Watts of output power



Performance Characteristics

Frequency.....	6.5 to 18 GHz
RF output power	200 Watts min
RF input power	0 dBm max
Small signal gain.....	60 dB min
Noise power density	-35 dBm/MHz max
Spurious.....	-50 dBc max
VSWR input	2.0:1 max
output.....	2.5:1 max
load (no damage).....	3.0:1 max

Environment

Temperature	-40 °C to +85° C
Cooling.....	conduction
Altitude.....	50,000 ft.
Humidity.....	Up to 100%, condensating
Shock.....	30 g, 11 msec
Acceleration	8 g
Vibration.....	6 grms, 20-2000 Hz
EMI/EMC	MIL-STD-461E
	CE102, CS101,
	RE101, RE102, RS103

L-3's M1245 is a high power amplifier with industry leading size, weight and power (SWaP) metrics. Containing a TWT, power supply, and SSA driver, this MPM produces over 200 watts of output power in a compact package, making it a compelling alternative to TWTAs or SSPAs for communications or EW applications in X and Ku-Bands.

Interface

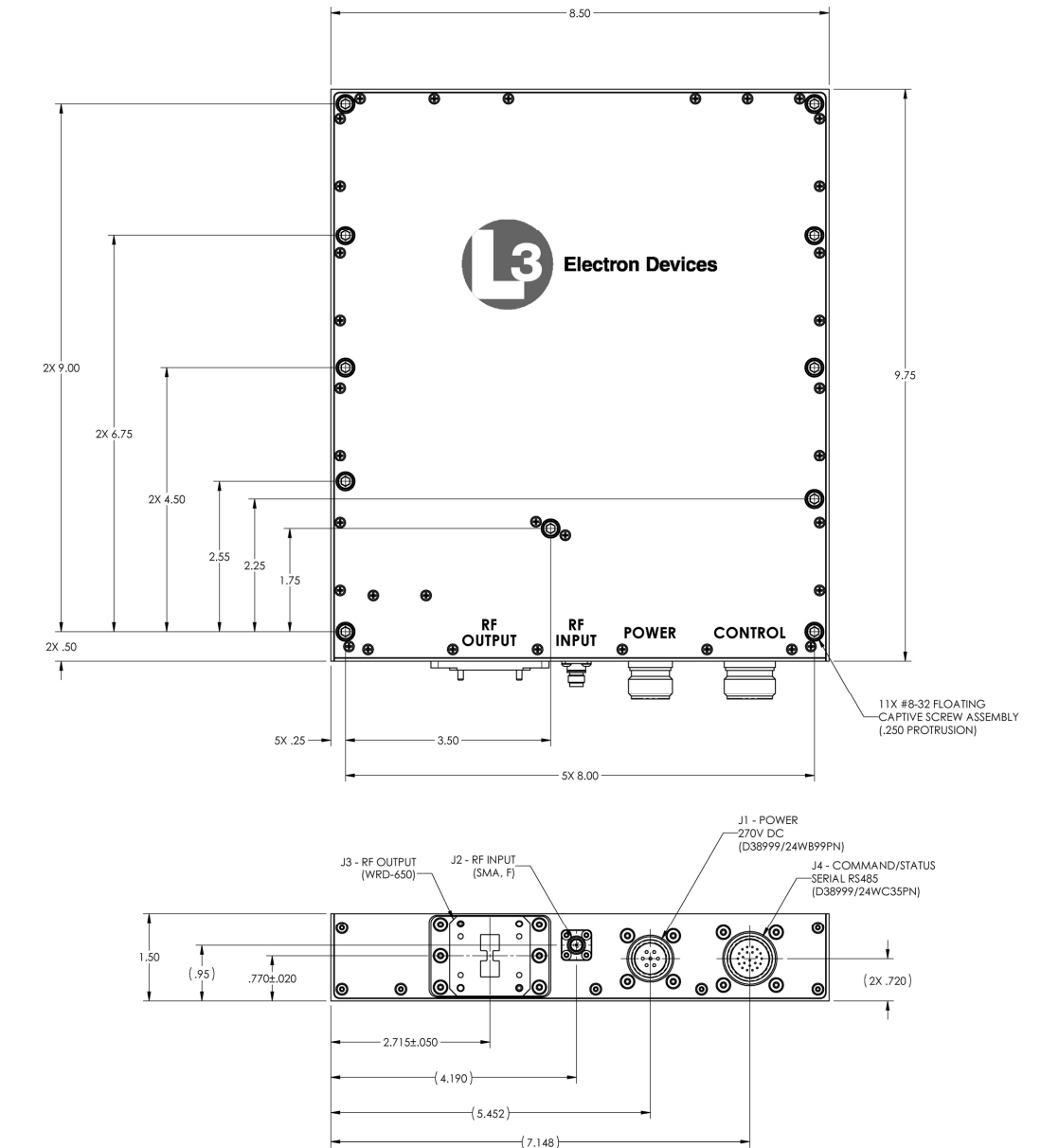
Prime power	270 VDC per MIL-STD 704E
	900 Watts max
Controls	HV on/off, RF on/off
Indicators.....	Warm-up indicator
	High voltage indicator
	Fault indicator
	Helix current

Mechanical Description

Dimensions	9.75 in. L. x 8.5 in. W x 1.5 in. H
Weight	8.0 lb. max
RF input connector.....	SMA (female)
RF output connector.....	WRD-650
Prime power connector	D38999/24WB99PN
Control connector.....	D38999/24WC35PN

This document consists of basic marketing information that is not defined as technical data under EAR Part 772.

Outline Drawing M1245



J1 - POWER	
PIN #	DESCRIPTION
1	+270
2	+270
3	+270
4	+270 RETURN
5	+270 RETURN
6	+270 RETURN
7	CHASSIS GROUND

P2-CONTROL			
PIN #		DESCRIPTION	
1	SPARE	12	RF ON INDICATOR
2	SPARE	13	RF ON INPUT
3	LOGIC GROUND (ISOLATED)	14	LOGIC GROUND (ISOLATED)
4	LOGIC +5V (ISOLATED)	15	LOGIC GROUND (ISOLATED)
5	SERIAL ENABLE INDICATOR	16	HV VALID INDICATOR
6	SERIAL ENABLE INPUT	17	HV ON/OFF INPUT
7	SPARE	18	FAULT INDICATOR
8	BATTLE OVERRIDE INPUT	19	WARM UP INDICATOR
9	BATTLE OVERRIDE INDICATOR	20	FAULT RESET INPUT
10	PULSE/CW SELECT INPUT	21	RS485 Tx
11	TWT MODULATOR INPUT	22	RS485 Rx



Electron Devices

Electron Devices
960 Industrial Road, San Carlos, CA 94070
(650) 591-8411 Fax: (650) 508-1956
Web Site: www.L-3com.com/edd
E-mail: scl.marketing@L-3com.com