

DESCRIPTION

This class AB GaN module is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density, efficiency, and linearity in a small, lightweight package.

**FEATURES**

High Speed On/Off Control

Temp. Monitor Output

Over-Temperature Protection

Auto Tx/Rx Switching (RF Detect)

Specifications subject to change without notice. Typical performance at VDC +25°C, and in a 50Ω system.

RF / ELECTRICAL				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	30		2700	MHz
PSat Power Output		+39.0		dBm
Gain		36.0		dB
Gain Flatness		3.0		dB ¹
Input Return Loss	-12	-15		dB
Operating Voltage	+12		+30	VDC
Current Draw		1.4		A
Switching Time		1.0	2.0	μS

1 – Gain flatness recorded represents a peak-peak measurement across the **entire operating band**. Gain flatness is typically much lower across significant portions of this band. Consult the gain response plots for details if available.

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	3.25 x 2.42 x 0.54	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Rectangular Locking	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Through Holes	--
Weight	4	oz.
Weight with Heatsink	8	oz.

ENVIRONMENTAL / PROTECTIONS

PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Humidity Range	0-95		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	+8		dBm
PA Baseplate Shutoff Temperature	+ 85		°C

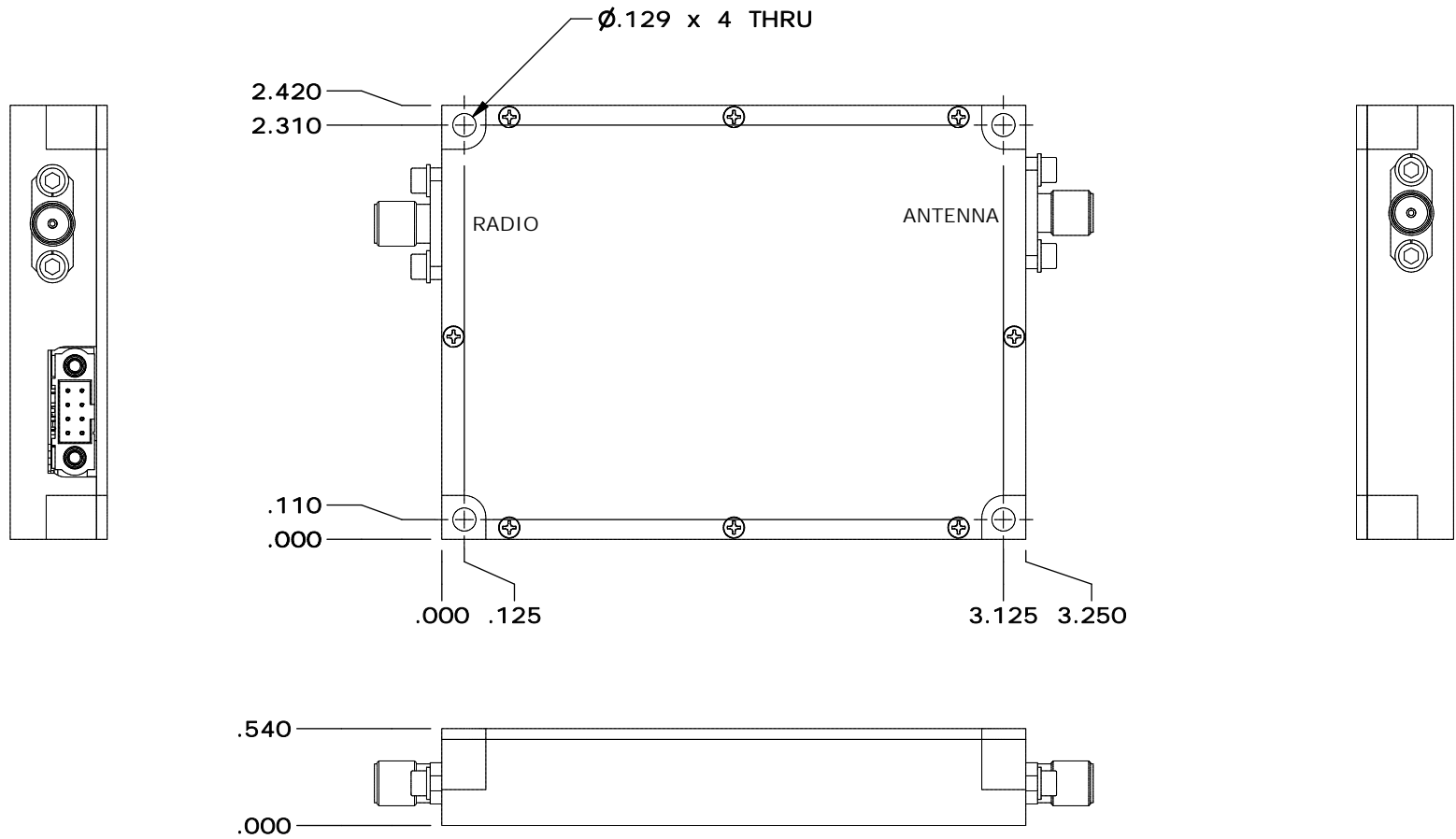
INPUT/OUTPUT PINS

AMPLIFIER CONNECTOR TYPE:		8 PIN RECTANGULAR MALE
TRIAD CABLE PART NUMBER:		CBL61
PIN NUMBER	LABEL	DESCRIPTION
1	TEMP	Analog Temperature Sensor Output
2,4,6	GND	Ground
5,7	+VDC	Supply Voltage - Range Specified in Datasheet
8	SGND	Signal Ground

Configuration Options

Model Number	Description
TA1112	No Heat Sink Included
TA1112 – HS	Standard Heat Sink
TA1112 – HSF	Heat Sink with Integrated Cooling Fan
TA1112 – HSX	Custom Heat Sink Configuration
TA1112 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
O	INITIAL RELEASE	7/10/19	SC



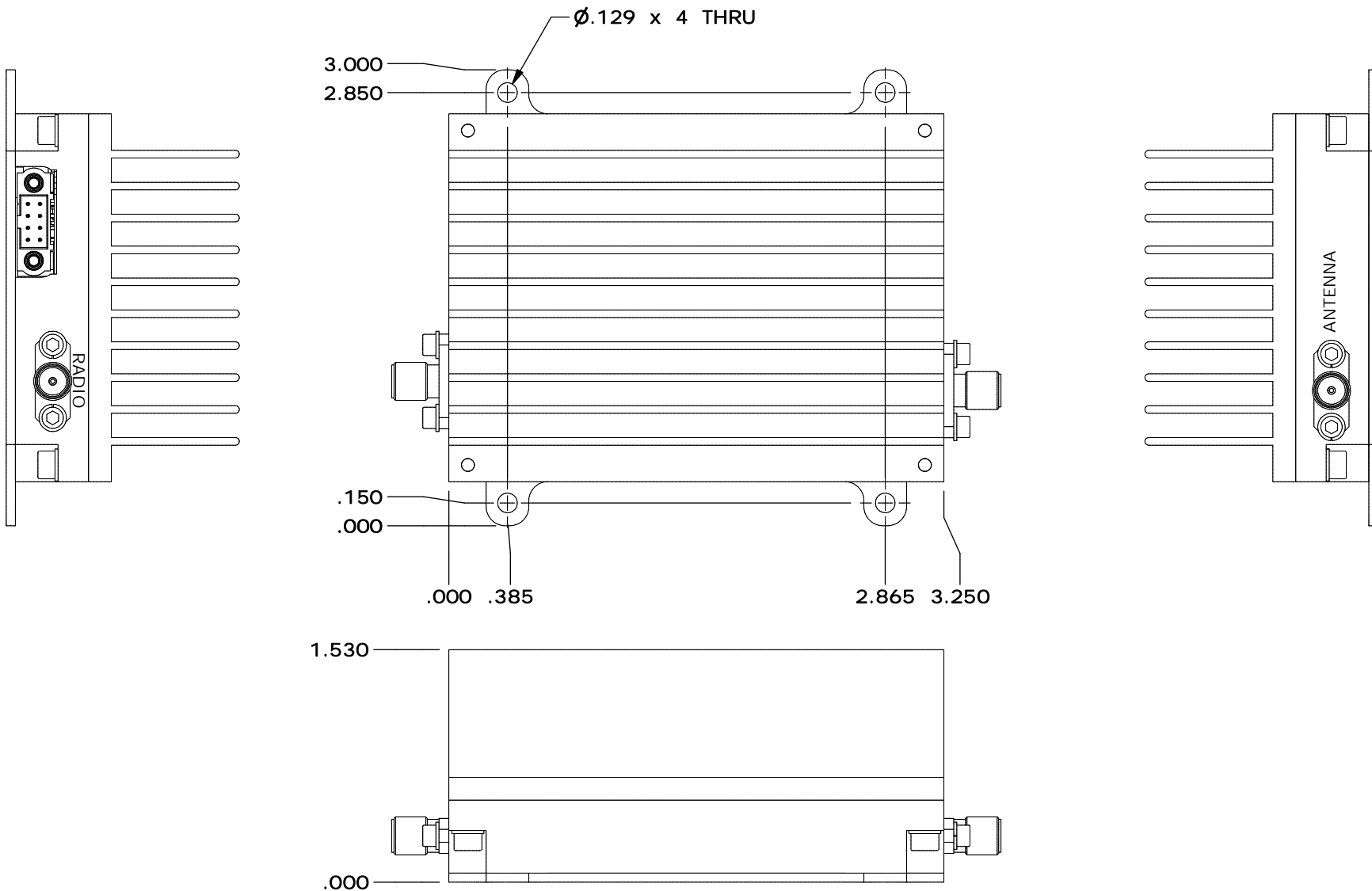
DRAWN	scopp	10/3/2013
DESIGNED	scopp	2/28/2018
CHECKED	SC	7/10/2019
ENG APPROVED		
MFG APPROVED		

TRIAD RF SYSTEMS
 11 HARTS LANE SUITE 1
 EAST BRUNSWICK, NJ 08816
 855- 558- 1001

Housing Outline 191

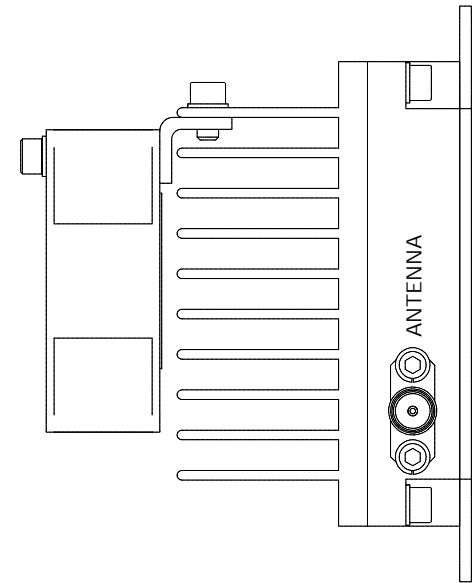
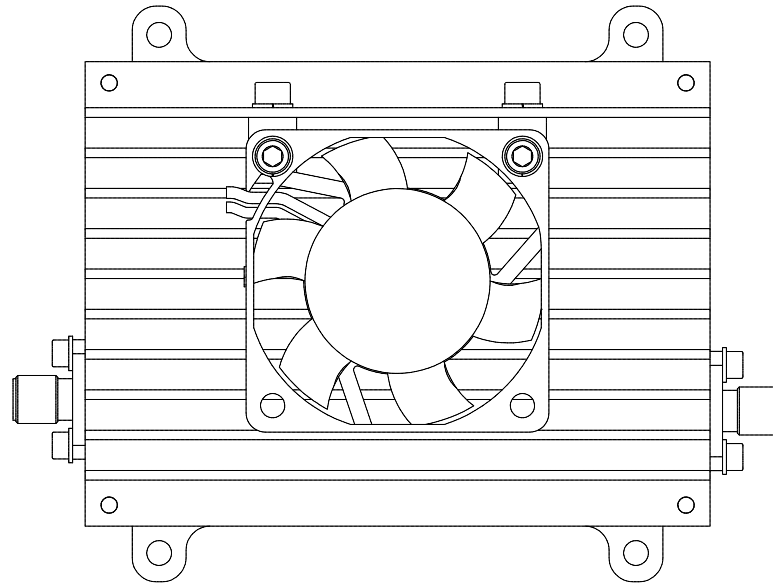
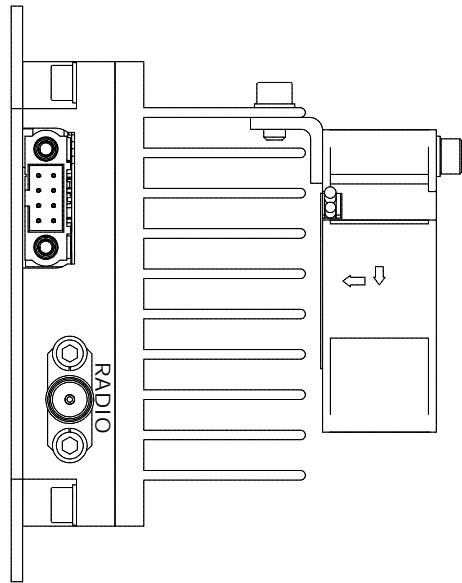
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES		SIZE A	DWG NO. OL_191	REV O
DECIMALS XX ±.01 .XXX ±.005	FRACTIONS ± 1/32	ANGLES ± 2°	SCALE: NONE	CAGE CODE 67DZ3
			SHEET 1 OF 3	

OPTIONAL HEATSINK

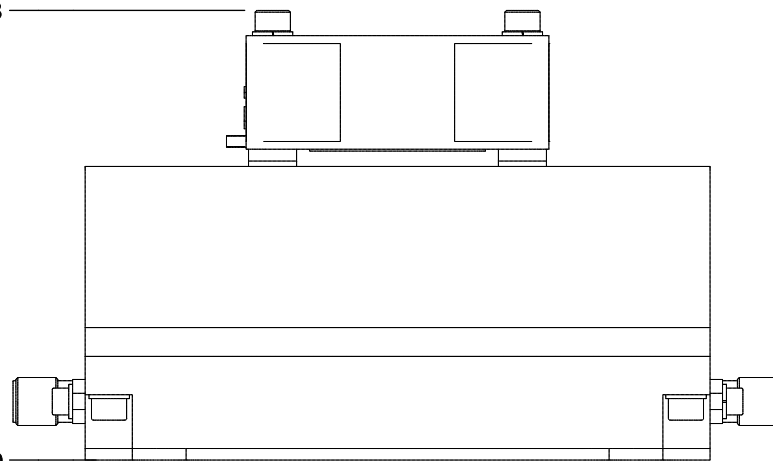


DRAWN	scopp	10/3/2013	Housing Outline 191		
DESIGNED	scopp	2/28/2018	SIZE	DWG NO.	REV
CHECKED	SC	7/10/2019	A	OL_191	0
ENG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3
MFG APPROVED					

OPTIONAL HEATSINK AND COOLING FAN



2.343



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DRAWN	scopp	10/3/2013	Housing Outline 191		
DESIGNED	scopp	2/28/2018	SIZE	DWG NO.	REV
CHECKED	SC	7/10/2019	A	OL_191	O
ENG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3
MFG APPROVED					