

# MEC-2425-PA

2400-2500MHz 47dBm Power Amplifier



The MEC-2425-PA is a 50 Watt (47dBm) high gain Solid State Narrowband Single Channel Transmit/Receive (Tx/Rx) Module. This amplifier module utilizes the latest GaN based technology. Salient feature includes TTL control for enable / disable which make it suitable for airborne applications.



## Product Features

47dBm Output at Psat

Modulations: CW, FM, AM, FSK, QPSK, OFDM

(Linear modulations with back-off power)

Single Supply Operation: Nominally 28V

Symbol	Parameter	Unit	Min.	Typ.	Max.
BW	Operating Frequency	MHz	2400		2500
PIN	RF Input	dBm		22	
PSAT	Output Power Saturated	dbm		≥47	
GF	Gain Flatness	dB		±1	
VSWR	Input / Output VSWR		1.2	1.4	1.6
NF	Rx Noise Figure	dB		< 2	
GTX	Tx Gain	dB		≥25	
GRX	Rx Gain	dB		≥20	
S11	Input Return Loss	dB		≤-15	
H	Humidity	%	1		100
VDC	Operation Voltage	Volt		28.0	
SWc	Tx / Rx Switching Time	sec		<1μ	
C°	Operating Temperature	°C	-40	25	+60

## Electrical Specifications @ +28.0VDC, 25°C, 50Ω System

Parameters	Value	Limit	Unit
Dimension (L x W x H)	172 x 80 x 65(Single) with Heat Sink	-	mm
RF Connector Input / Output	SMA Female	-	-
DC Interface Connector	3-PIN HIROSE Connector	-	-

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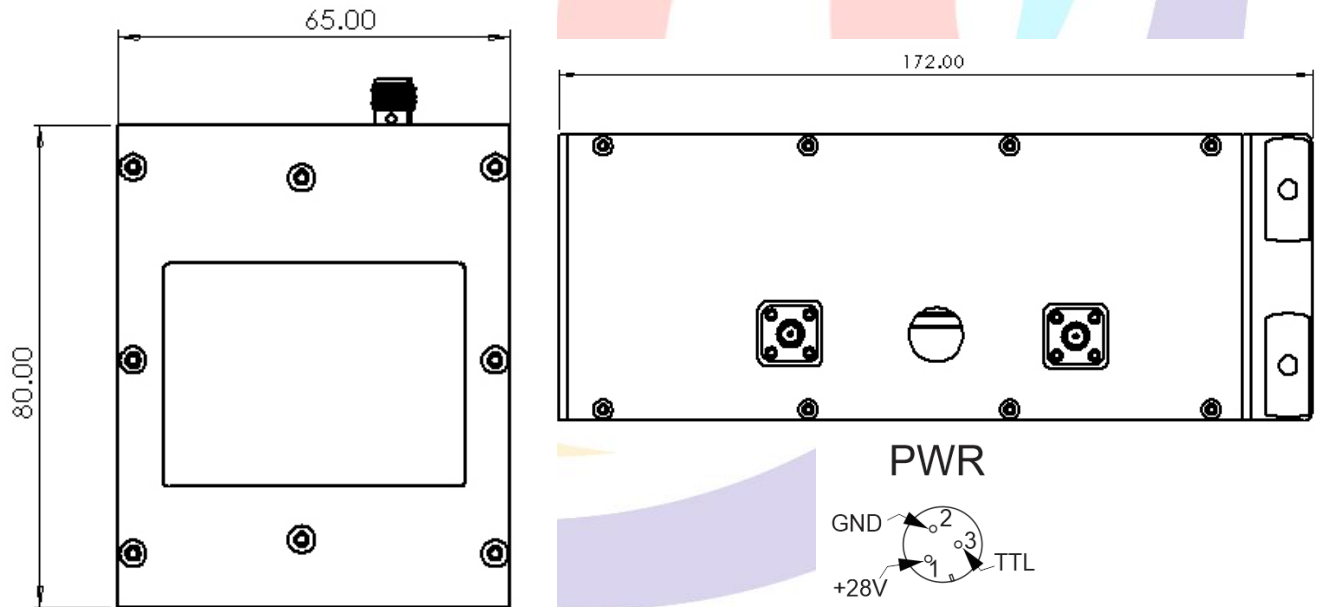
## Control Signal

Item	Specifications for Activation	Remark
TTL Enable/Disable	Yes	TTL option available in connector

## DC Interface (3-PIN Circular Connector)

Pin No	Pin Description	Specifications	Remark
1	VDD	+28VDC	
2	GND	GND	
3	TTL Enable/Disable	TTL LOW = RX TTL HIGH = TX	

## Mechanical Drawing



Note: All Dimensions are in mm.