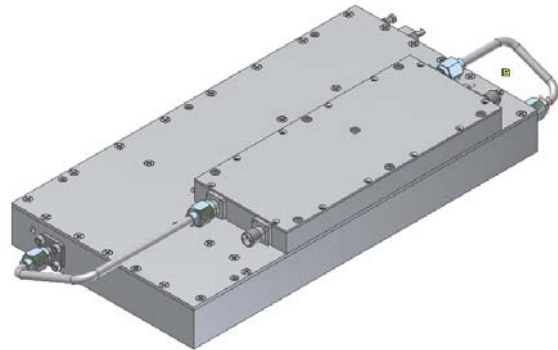


Stealth Microwave's **SMTR2527-47** is a solid state bi-directional amplifier for use in 802.16e TDD products and systems. This compact, high linearity PA can easily be integrated into both BTS or CPE devices, and exhibits excellent uplink and downlink performance. Typical output power for 802.16e is 39-40 dBm meeting EVM and spectral mask requirements.



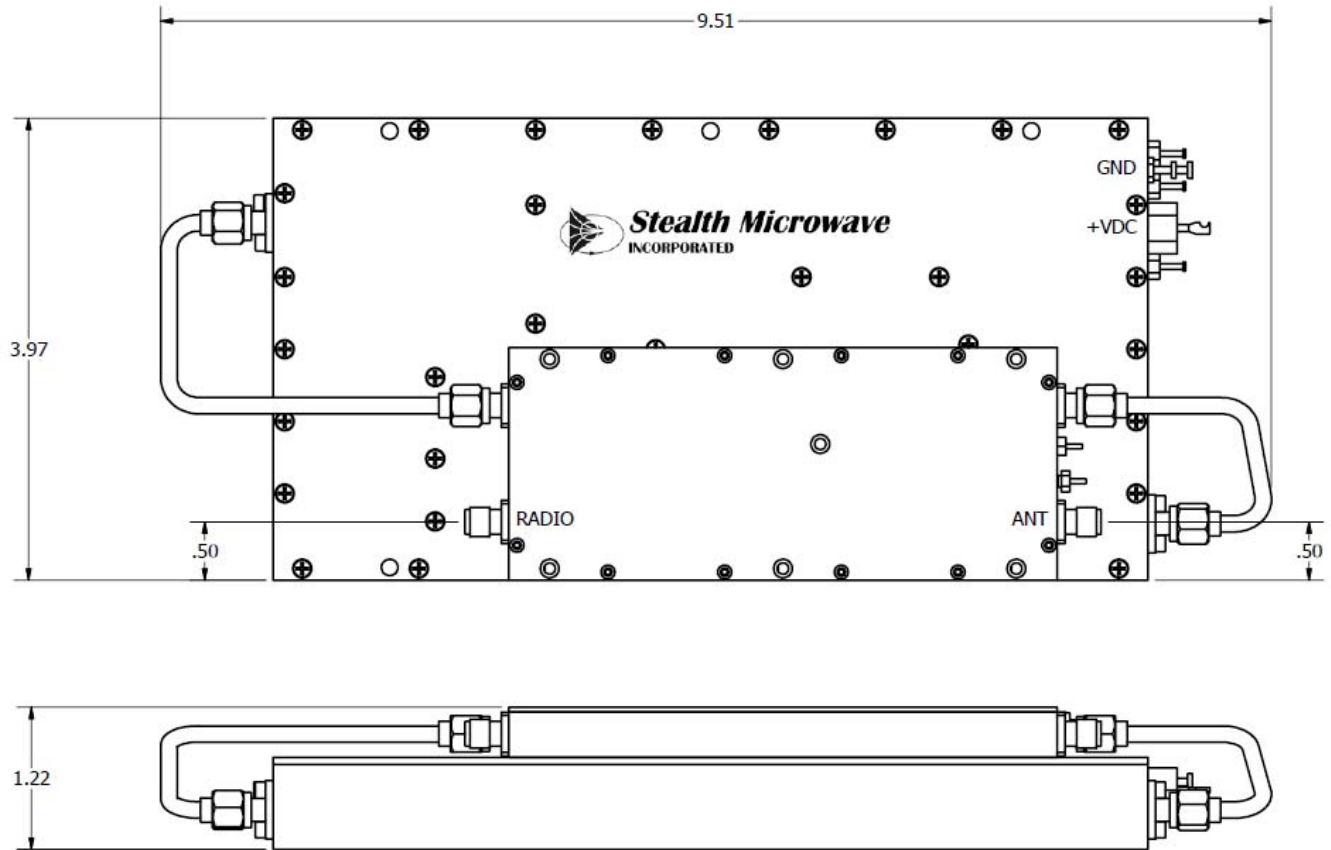
Features

- Auto (RF Tx Detect) or Manual (TTL) Tx/Rx Switching
- Integral receive filter
- Various RF connector and housing options available

Transmit Path				
Parameter	Specification			
	Min	Typ	Max	Unit
Frequency Range	2500	-	2700	MHz
802.16e Power Out	39	40		dBm
EVM at 35dBm		-33		dB
Gain		25 ± 1		dB
Gain Flatness		± 0.5		dB
Input Return Loss	-14	-18		dB
DC Input Voltage	10	12	13	V
Current Draw (RMS)		8.5		A
Receive Path				
Gain		20 ± 1		dB
P1dB	5			dBm
Noise Figure		3		dB
Input Return Loss		-14		dB
Current Draw		110		mA

Mechanical Dimensions	9.5 x 4.0 x 1.22 inches
RF Connectors	SMA Female
Weight	1 lb. 4 oz.
Operating Temperature (Baseplate)	-10°C to +70°C

DIMENSIONS IN INCHES



Pin	Description	Values
RADIO	Input Connector (SMA-F)	+ 10 dBm (typical, adjustable per customer requirement)
ANT	Antenna Connector (SMA-F)	+39-40 dBm burst power (802.16e)
+VDC	Supply Voltage	+12V
GND	Ground	--

TYPICAL WiMAX PERFORMANCE – 40dBm @ 2%EVM, 5MHz BW

IEEE 802.16 - 2004							
Frequency:	2.608 GHz	Signal Level Setting:	0.9 dBm	External Att:	39.8 dB		
Sweep Mode:	Continuous	Trigger Mode:	Free Run	Trigger Offset:	-10 μs		
Burst Type:	OFDM DL Burst	Modulation:	64QAM3/4	No Of Data Symbols:	1/2425		
Result Summary							
No. of Bursts	6					*	
	Min	Mean	Limit	Max	Limit	Unit	
EVM All Carriers	-35.09	-35.02	-31.00	-34.93	-31.00	dB	
EVM Data Carriers	-35.10	-35.02		-34.93		dB	
EVM Pilot Carriers	-35.01	-34.89		-34.81		dB	
IQ Offset	-26.73	-26.73	-15.00	-26.71	-15.00	dB	
Gain Imbalance	0.00	0.00		0.00		dB	
Quadrature Error	-0.397	-0.392		-0.389		°	
Center Frequency Error	-0.50	-0.69	± 20864	-0.84	± 20864	Hz	
Clock Error	0.04	0.08	± 8	0.13	± 8	ppm	
Burst Power	40.12	40.12		40.12		dBm	
Crest Factor	8.30	8.30		8.31		dB	
RSSI	3.14	3.19		3.28		dBm	
RSSI Standard Deviation		-6.06				dB	
CINR	36.85	37.84		38.92		dB	
CINR Standard Deviation		24.60				dB	
Running ...							
<div style="display: flex; justify-content: space-between; align-items: center;"> SPECTRUM WiMAX AUTO LVL RUN SGL RUN CONT REFRESH SCREEN A </div>							

GENERAL SETTINGS

DEMOD SETTINGS

DISPLAY
LIST GRAPH

FLATNESS
FLAT GRDEL

FLATNESS
DIFFERENCE

SPECTRUM
IEEE ETSI

SPECTRUM
FFT

ACP
ABS REL