

The **SM7177-43** is a 7.1 to 7.7 GHz solid state GaAs FET amplifier designed for European digital video broadcast applications. The amplifier provides 58 dB of linear gain with a P1dB of +43 dBm. It is available in modular form (standard), as a lab unit or in a 19" rack mount form.

### Features

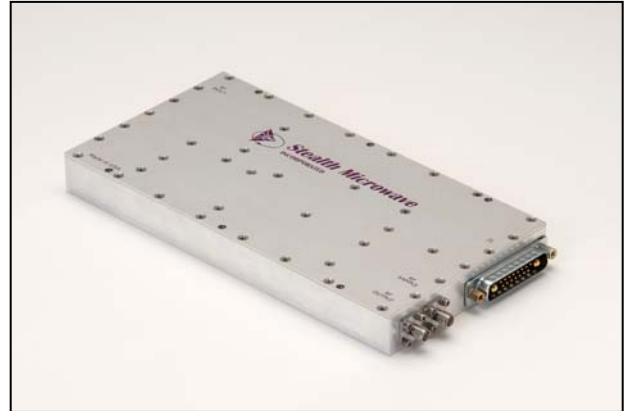
- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation

### Options

- Forward/Reverse Power Detection
- RF Sampling Port
- Fan
- Pulse Control for TDD applications with speeds up to 800 nsec rise/fall time
- Logic On/Off Control
- Integral Heatsink

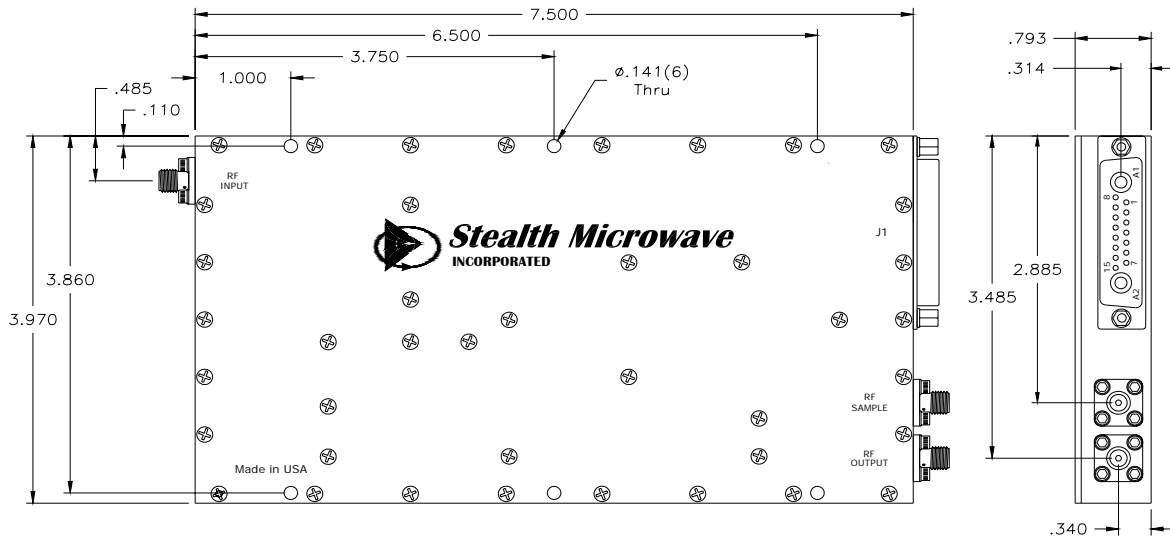
### Configurations

- Module
- Laboratory Unit
- 19" Rack Mount



Parameter	Specification
Frequency Range	7.100 – 7.700 GHz
Pout (P1dB)	+43 dBm
Output Third Order Intercept Point (OIP3)	+54 dBm
Linear Gain	58 dB ± 2 dB
Gain Flatness (over full band)	± .75 dB
Gain Change (over temperature)	± .5 dB
Input/Output Return Loss	-16 dB / -16dB
DC Input Voltage	+12 Volts
DC Input Current	9.2 Amperes (operational)
Mechanical Dimensions (Without Heatsink)	7.50 x 3.97 x .79 inches
RF Connectors	SMA Female
Operating Temperature (Baseplate)	0°C to +55°C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

**DIMENSIONS IN INCHES**



Pin	Description	Values
RF INPUT	Input Connector ( SMA Female )	- 17 dBm (typ.)
RF OUTPUT	Output Connector (SMA Female)	+ 43 dBm min @ P1dB
RF SAMPLE	RF Sample Port (SMA Female )	30 dBr
GND	Ground Turret	---
FWD	Forward Power Detector	+ 39 dBm Output Power $\approx$ + 5.0 Volts
REV	Reverse Power Detector	$\infty$ VSWR @ + 39 dBm $\approx$ + 4.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 9.2 Amperes. (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	TTL Pulse Control	Rates < 800 nsec

Specifications subject to change without notice.