

## API™ RF Signal Extender for SecNet 11®

Extend outdoor range of SecNet 11 modem up to 5 miles.



- **Extends range of SecNet 11® for up to 5 miles**
- **Ideal for use in a variety of ground mobile applications**
- **Supports both SecNet 11 low and high power modes**
- **Lightweight, highly portable and ruggedized**
- **Easily attaches to MRAP antenna**
- **MIL-STD-1275 compliant**

Designed to improve warfighter communications, the API™ RF Signal Extender is a highly portable, plug-in amplifier/power supply solution that vastly extends the outdoor range of SecNet 11®. The power amplifier can then be attached to the antenna mount plate on the Mine Resistant Ambush Protected (MRAP) vehicle. Overall, the solution is easy to deploy and can significantly improve the availability of secure wireless communications.

# Technical Specifications: API™ RF Signal Extender for SecNet 11®

## Complete set includes:

1. Amplifier
2. Power supply with integrated bias-T

RF Power Amplifier Electrical Specifications	
Operating Frequency Range: <i>Receiver includes a hard limiter and band pass filter</i>	2400 - 2500MHz
Linear Transmit Power (@SecNet11 output of 17dBm@EVM<3%)	30dBm +1/-0dBm
Max Saturated Output Power	37dBm +/- 0.5dBm
Transmit Gain	17dB
Transmit Switchover Threshold	<=0dBm
Transmit Switchover Time	<500nSec
Transmitter Protections	Antenna mismatch, open or short RF in without power
Receive Gain	17.5dBm
Max Receiver Linear RF Output	-25dBm
Noise Figure	<3.2dB
Receiver Overload Protection	<20dBm for indefinite time
Insertion Loss in Bypass Mode	<3.4dB
Power Consumption (50% duty cycle, 18Vdc supply, 1W out) (100% duty cycle, 18Vdc supply, 1W out)	0.5A nominal 0.65A nominal
Operating Temp.	-40°C to + 70°C

Bias-T Electrical Specifications:	
Insertion Loss	0.5dB
Power Input via BNC (center pin is positive)	9V to 36V
Power Input Protections <i>Max Reverse Voltage</i> <i>Max Over Voltage</i> <i>Max Over Current</i>	-40V 80V 1A
Power Output Protections <i>Output Short Circuit (LEDs blinking)</i> <i>Output Open Circuit</i>	Current limit of 20mA
Operating Modes	Bypass (output of 8V) Normal (output of 25V)
Status LEDs <i>Normal</i> <i>Bypass</i> <i>Output Short Circuit</i>	Green LED on Green and Red LED on LEDs blinking

## Mechanical:

### Amplifier

Dimension: 1.65" (42 mm) diameter / 5.25" (133 mm) long (includes RF connectors)  
 Enclosure: Weatherproof, machined aluminum  
 Weight: 8.8 oz. (249 g)  
 Connectors: Type N male to antenna port and N female to radio port

### Power Supply/ Bias-T

Dimension: 4.10" x 3.40" x 1.16" (includes RF connectors)  
 Enclosure: Machined aluminum housing with clear iridite finish  
 Weight: 6.0 oz. (226 g)  
 Manual Override Switch: Bypass and normal mode  
 Connectors: Type N female both ends

### Product Information

www.apitech.com  
 +1 814.467.9060  
 sales@apitech.com

