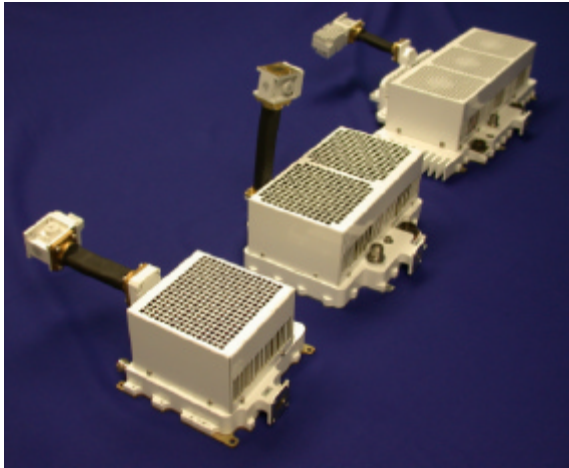




Norsat<sup>®</sup>  
International Inc.

## Ku-Band 8 to 50 Watt



## SSPA

Norsat Ku-band Solid State Power Amplifier (SSPA) offer state-of-the-art performance and reliability in a small, lightweight, package.

This product is ideal for demanding VSAT applications, such as:

- Point-of-Sale and Inventory Control
- Information/Data Distribution and Access
- Telecommuting and Tele-Education
- Portable, Monitoring and Emergency Communications
- DVB Network return paths

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### Norsat Advantages

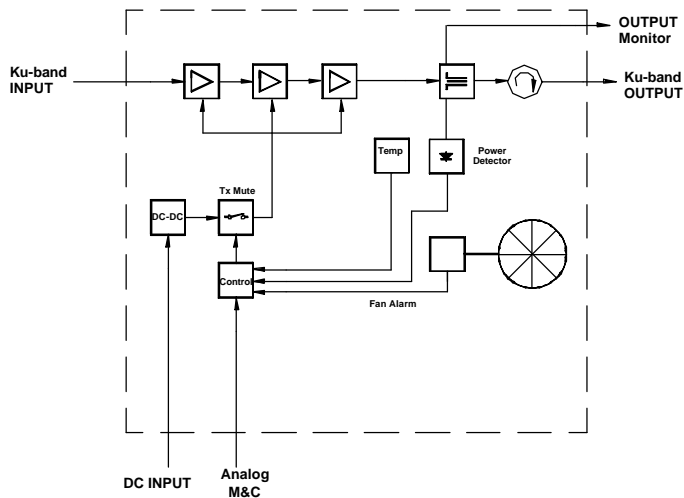
- Small, lightweight package for low-cost
- Power efficient for remote site applications
- CE and ETSI EN 301 428 (2000-05) compliance for global applications
- Next generation single RF board design and advanced MMICs for greater reliability

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Be certain.



# SSPA Technical Specifications



## Electrical Characteristics

### Input:

#### Frequency Range

- 14 to 14.5 GHz

#### Input VSWR

- 2.5 : 1

#### Input Interface

- WR75

#### Maximum Input Power (without damage)

- +33 dBm

### SSPA DC Power

- 24 VDC for 8 to 25 W SSPA
- 48 VDC for 50W SSPA

### SSPA Power Consumption

- < 200 W – 8W SSPA
- < 220 W – 10W SSPA
- < 300 W – 20W SSPA
- < 320 W – 25W SSPA
- < 600 W – 50W SSPA

### Size

- 190mm x 180mm x 110mm – 8W SSPA
- 260mm x 270mm x 110mm – 16W and 25W SSPA
- 300mm x 450mm x 130mm – 50W SSPA

### Mass

- 3 Kg – 8W SSPA
- 5 Kg – 16W and 25W SSPA
- 9.2 Kg – 50W SSPA

## Output:

### Frequency Range

- 14 to 14.5 GHz

### Output VSWR

- 1.25 : 1

### Nominal Gain

- 22 dB typical – 8W to 25W SSPA's
- 24 dB typical – 50W SSPA

### Gain Stability over Temperature

- $\pm 2.5$ dB at any constant frequency

### Gain flatness at constant temperature

- $\pm 0.6$  dB in any 36 MHz band
- $\pm 3$ dB over full 500 MHz band

### Spurious at rated power

- -60 dBc typ.

### Harmonics at rated power

- -65 dBc max (with optional harmonic filter)

### Spectral regrowth at rated power

- > 25dBc

### Rated Power

- 39dBm typical – 8W SSPA
- 40dBm typical – 10W SSPA
- 43dBm typical – 20W SSPA
- 44dBm typical – 25W SSPA
- 47dBm typical – 50W SSPA

### Output Interface

- WR-75 (Isolator)

### Output Monitor

- -40dB typical (N female)
- -44dB typical for 50W SSPA

### Operating Temperature

- -30 to +50 degrees Celsius

### Humidity

- Up to 100%

### Monitor:

- SSPA Temperature
- Output Power Detector
- Fan Alarm

### Control:

- SSPA Mute