# AAA11 Series

## Compact 100W/200W C-Band High Power SSPA

This small and lightweight SSPA is ideal for mobile and satellite uplink applications.

The SSPA has excellent efficiency and consumes less than 1300W for 200W RF power. Innovative and efficient thermal design makes this SSPA one of the smallest in the industry.

Built-in redundancy-ready feature eliminates the use of an external controller for 1:1 redundancy operation. This eliminates messy cabling at the antenna making this a very elegant solution.

Extensive M/C interface with RS232/485, Ethernet (SNMP & HTTP) and Wifi.

## Features

- Compact and lightweight
- Available for all C-Band frequencies
- Forward & reverse power detection facility
- Input power detection facility
- Intuitive monitoring & control through RS232/485, Ethernet (SNMP & HTTP)
- Automatic fault identification & alarm generation
- Temperature compensation facility
- Built-in redundancy facility
- Built-in 10MHz reference with auto-detection
- Built-in harmonics reject filter
- Sample port for output monitoring
- Wide operating temperature range -40ºC to +60ºC
- RoHS Compliant
- Waterproof

## Quality Assurance

100% of all SSPAs go through stringent quality checks in addition to well defined Electrical Stress Screening to ensure operation in harsh outdoor environments. The SSPAs are also subjected to seal test for water ingress verification.

## Reliability

Field proven under harsh environment conditions, Agilis ODUs can withstand temperature ranging from -40ºC to +60ºC with up to 100% humidity.

## Frequency Band

**INTELSAT**
Tx : 5.850 to 6.425GHz

**INSAT**
Tx : 6.725 to 7.025GHz

**PALAPA / ST1**
Tx : 6.425 to 6.725GHz

**FULL C**
Tx : 5.850 to 6.725GHz

**EXTENDED**
Tx : 5.725 to 6.725GHz

**Table 1**

Agilis

# AAA11Series

## Compact 100W/200W
## C-Band High Power SSPA

## Technical Specifications

### RF Specifications

| | |
|---|---|
| **Transmit Frequency** | Intelsat / Full C/ Insat/ Palapa C/Extended |
| **Output Power @ P1dB** | 50dBM (100W) /<br>53dBm (200W) |
| **Small Signal Gain** | 50dB Min |
| **Gain Flatness** | ±0.75dB over the O/P frequency band |
| **Gain Variation** | ±0.75dB over the operating temperature range |
| **Gain Control** | 20dB in step of 0.5dB<br>30dB in step of 0.1dB (optional) |
| **O/P spurious** | According to EN301443 |
| **Phase Noise @ Offset** | -80dBc/Hz |
| **1KHz** | -90dBc/Hz |
| **10KHz** | -100dBc/Hz |
| **100KHz** | |
| | 1.5.1 |
| **I/P VSWR** | 1.5.1 |
| **O/P VSWR** | 70dBm/ 4KHz |
| **Noise Power Density Tx BD** | 142dBm/ 4KHz |
| **Rx BD** | |

### DC Power Requirement

| | |
|---|---|
| **Prime Power** | 90 – 264VAC, 50 – 60Hz |
| **Power Consumption** | 600W (Typical for 100W)<br>1000W (Typical for 200W) |

### Interfaces

| | |
|---|---|
| **IF Input Interface** | 50Ohms N-type Female |
| **Output Interface** | CPRG 137G |

### Monitor & Control

| | |
|---|---|
| **Monitor** | SSPA Temperature<br>Status Alarm<br>RF Output Power/RF Input Power<br>RF Reflected Output Power<br>LED Status Indication |
| **Control** | Attenuation<br>RF output mute |
| **Interface** | RS232/485, Ethernet (SNMP & HTTP) &<br>Wifi (Optional) |
| **Tx Redundancy** | Built-in |

### Environmental

| | |
|---|---|
| **Operating Temperature** | -40°C to +60°C |
| **Humidity** | Up to 100%<br>Weather protection sealed to IP65 |

### Mechanical

| | |
|---|---|
| **Size** | 284L x 209W x 164H |
| **Weight** | 9kg |
| **Color** | White Powder Coat |

### Compliance Standard

| | |
|---|---|
| **IEC 609501-2nd Edition** | International Safety Standard for Information Technology Equipment |
| **ETSI EN 301 489-12** | Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) Standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal, Satellite Interactive Earth Stations operated in the frequency ranges between 4 GHz and 30 GHz in the fixed Satellite Service (FSS) |
| **ETSI EN 301 489-1** | Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment and Services |
| **FCC Class A** | Two levels of radiation and conducted emissions Limits for unintentional radiators (FCC Mark) |

Note: All specifications are subject to change without notice.
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Request A Quote

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