AAA 21 Series

800W
C-Band SSPA Booster

Agilis AAA 21 Series C-Band SSPA (Solid State Power Amplifier) Boosters offer premium performance and reliable microwave power amplification for satellite hub and remote terminals. Based on state-of-the-art technology, Agilis SSPA provides high RF power and gain stability for uplink applications. It is highly linear with guaranteed output power suitable for multi-carriers operation.

Equipped with efficient thermal management, Agilis SSPAs provides good heat dissipation enhancing long-term reliability. Agilis SSPA can operate as a stand-alone unit or as an addon to boost up the transmit power for VSAT transceivers.

Features

- High RF output power
- Low spurious levels
- Various output power rating
- Easy installation & configuration
- RF output monitor port
- RF input monitor port
- Built-in Redundancy (optional external Redundancy unit)
- Surge Protection
- Built-in M&C
- Built-in Isolator & Harmonic reject filter
- Hot swappable feature by unit level

Applications

- Broadcast
- Video conferencing
- Rural Telephony
- Emergency Link restoration
- Point-of-sales
- Hub and VSAT Terminals

Enhanced Monitoring and Control

Agilis SSPA offers M&C via RS485 / RS232 and Ethernet interface. It features full remote M&C through Windows using PC.

These include:
- Tx level monitoring
- Temperature monitoring
- RF inhibit selection
- Gain control
- Automatic fault identification & alarm

Reliability

Field proven under harsh environment conditions.

Agilis Indoor SSPA can withstand temperature ranging from 0°C to +50°C with up to 100% humidity.

Quality Assurance

Agilis Indoor SSPAs go through intensive active electrical stress screening with performance being monitored during screening.

Agilis

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Technical Specifications

Frequency Range (GHz)

Intelsat	**5.850 – 6.425**

Transmit

Power	Output Power (Psat / P1dB)	Small Signal Gain (dB)	Power Consumption Typical
800W	59.0 / 58.5	70 Min	5 KVA

Gain Flatness Over Full BW	±1.5 dB max
Gain Flatness Over Any 40 MHz	±0.6 dB max
Gain Variation Over Temperature	±1.5 dB max
Gain Control Range	20 dB min step 0.1 dB
Input VSWR	1:3:1 max
Output VSWR	1:3:1 max
Inter Modulation	-25 dBc Relative to combine power of two carriers at 3dB total power backoff from P1dB
Harmonics (@P1dB)	- 60 dBc max
Spurious (@P1dB)	- 60 dBc max
Residual AM (0 – 10kHz)	-45 dBc max
(10 kHz – 500kHz)	-20 (1.0+logF*) dBc max
(500 kHz – 1MHz)	-80 dBc max
Group Delay (in any 40MHz band)	
Linear	±0.03 nsec/MHz max
Parabolic	±0.003 nsec/ max
Ripple	1.0 nsec p-p max
Maximum Input Power	+10 dBm (without damage)
Noise Figure at Gain max	10.0 dB max
Display	24 x 2 LCD Display
Power Supply Frequency Voltage	220 Vac, 1 phase ±10.0% 47Hz ~ 63Hz

Hot swappable feature for both RF and power supply by unit level 400W

Interface

RF Input	50ohms N-Type Female
RF output monitor	50ohms N-type @ 40dB coupling factor
RF Output	50ohms CPR137G waveguide

Monitor And Control

Monitor	SSPA Temperature Status Alarm RF Output Power Reflected power
Control	SSPA On/Off Gain Control (Attenuation Control)
Protection	Over temperature SSPA shutdown Reflected power shutdown
Interface	RS485 / RS232 Ethernet RJ-45 (SNMP +HTTP)

Environmental

Operating Temperature	0°C to + 50°C (Indoor SSPA)
Relative Humidity	Up to 95°C (Non-condensing)
Cooling	Forced Air Cooling

Mechanical

Size	19” rack, 12 RU height
Weight	69 kg
Colour	Grey

Compliance Standard

IEC 60950C	International Safety Standard for Information Technology Equipment
ETSI EN 300 673	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) Standard for Very Small Aperture Terminal (VSAT)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment and Services

Note: All Specifications are subject to changes without notice
Ver. 080514

Request A Quote

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