

# AAA Series C-Band VSAT Outdoor SSPA Booster



Agilis AAA Series C-Band Outdoor SSPA (Solid State Power Amplifier) Boosters offer premium performance and reliable microwave power amplification at satellite hub and remote terminals. Based on state-of-the-art technology, Agilis SSPA provides high RF power and gain stability for uplink applications. The SSPA weatherproof design enables it to be used for all harsh environmental conditions. The SSPA is highly linear, suitable for multiple channel operation. With guaranteed P1dB output power, Agilis SSPAs provides reliable solution for all your power transmission requirements.

Equipped with efficient thermal management, Agilis SSPA provides good heat dissipation at all conditions to enhance long term reliability. Agilis SSPA can operate as a stand-alone unit in any C-Band application or as an add-on to boost up the transmit power for VSAT transceivers.

## Features

- High RF output power
- High ICP3 (3<sup>rd</sup> order intercept)
- Low spurious levels
- Various output power rating
- Easy installation & configuration
- RF output sample port
- Available for specific satellite bands
- Built-in M&C
- Redundancy ready
- Surge Protection

## Applications

- Hub and VSAT terminals
- Video conferencing
- Broadcast
- Multiple networks

## Enhanced Monitoring and Control

Agilis SSPA offers M&C via RS232/485. It features full remote M&C through Windows using PC or WinCE PDA.

These include:

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

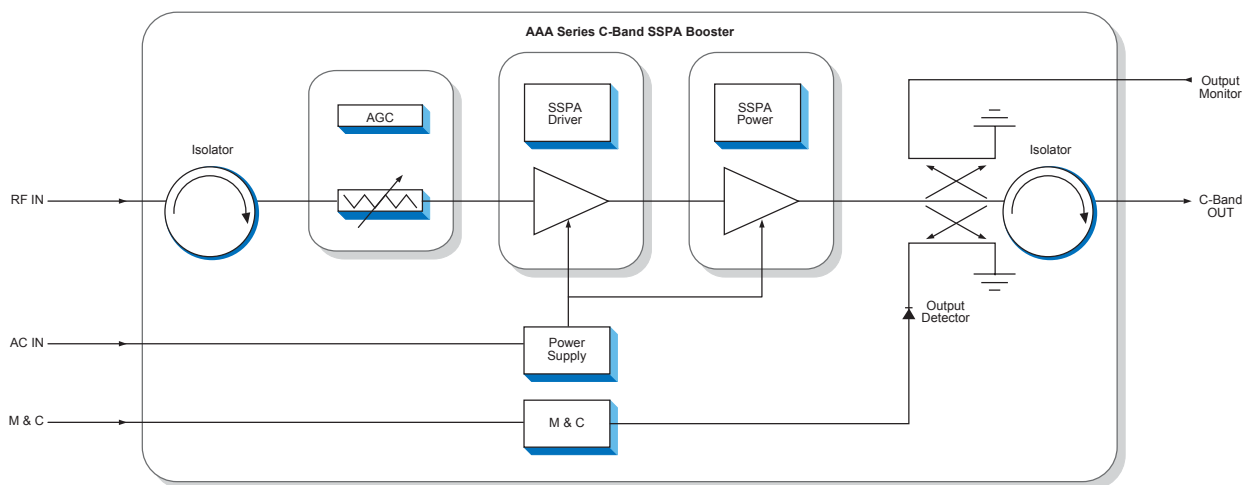
## Reliability

Field proven under harsh environmental conditions. Agilis ODU can withstand temperature ranging from -40°C to +60°C with up to 100% humidity.

## Quality Assurance

All Agilis ODUs go through 72 hours burn-in at +60°C with performance being monitored. In addition, all units undergo 100% waterproof test equivalent to IP65 to ensure operation in tropical, cold and harsh environment.

## TECHNICAL SPECIFICATIONS



### Frequency Range (GHz)

Frequency	Transmit
Intelsat	5.850 - 6.425
Gorizont	5.725 - 6.275
Insat	6.725 - 7.025
Full-C	5.850 - 6.725
ST-1/Palapa C	6.425 - 6.725
JCSAT	6.225 - 6.485

### Transmit\*

Power	Output @P1 dB (dBm) min	Gain (dB)	Power Consumption (VA) typ
20W	43	44 - 48	200
30W	45	46 - 50	240
40W	46	47 - 51	280
50W	47	48 - 52	300
60W	48	49 - 53	360
80W	49	50 - 54	500
100W	50	51 - 55	700
125W	51	52 - 56	800
150W	52	53 - 57	1000
200W	53	54 - 58	1200

Gain Flatness Over Full BW	±1.0 dB max
Gain Slope Over 36 MHz	±0.3 dB max
Gain Stability Over Temperature	±1.5 dB max
Gain Control Range	10 dB max
VSWR Input	1.5:1 max
Output	1.5:1 max
Intermodulation (with 2 carriers, 1MHz apart, at 6dB backoff from Output @P1 dB)	-25 dBc max
Harmonics (@P1 dB)	-60 dBc max
Spurious (@P1 dB)	+10 dBm
Maximum Input Power	

### Environmental

Operating Temperature	-40°C to +60°C
Relative Humidity	Up to 100%

### Interface

RF Input	50Ω N-type Female
RF Output	50Ω N-type Female (Optional CPR137G)

### Monitor And Control

Monitor	SSPA Temperature Status Alarm RF Input / RF Output Power RF Output monitor -30 dBc Redundancy control On/Off control
Control	Temperature RS232 / RS485
Threshold Setting	Over temperature and current shutdown
Interface	
Protection	

### Power Supply

Input Voltage	220Vac or 110Vac (Factory Preset)
---------------	-----------------------------------

### Mechanical

Size	410L x 175W x 275H mm	(20W)
	342L x 278W x 173H mm	(30W to 60W)
	420L x 400W x 290H mm	(80W to 200W)
Weight	13.0 kg	(20W to 60W)
	23.5 kg	(80W to 200W)

\*Transmit power range may not be available for all frequency range - check with factory.  
Note: All specifications are subject to changes without notice