



TTI-SSPA-Ka

Ka-Band SSPA Series



The **Ka-band SSPA Series** are outdoor solid state power amplifiers intended for satellite up-link communications.

The Ka-band SSPAs provide the capability of remote M&C via serial port (RS232/RS485), including alarms related to temperature and current, as well as power supply shutdown to protect the amplifier from damages. 40W, 60W and 120W model provide the capability to monitor forward and reflected power.



TECHNICAL SPECIFICATIONS

ELECTRICAL

	10W	20W	40W	60W	120W
Frequency range	29 to 31 GHz 25.25 to 27.5 GHz				
Saturated Output Power (min)	40 dBm	43dBm	46dBm	48dBm	51dBm
Linear Output Power (min)	37 dBm	40dBm	43dBm	45dBm	48dBm
Gain	50dB	50 dB (optional 60dB)		65dB	60dB
Gain flatness	± 1 dB in full band				
Gain stability at Constant Temp	± 0. 5 dB/24 hours			± 0.25 dB/24 hours	
Input VSWR	< 1.8:1	< 1.5:1			
Output VSWR	< 1.8:1	< 1.5:1			
Spurious	< -60 dBc				
Harmonics	< -60 dBc				

MECHANICAL INTERFACES

	10W	20W	40W	60W	120W
Input RF Connector	Coaxial K (female)				
Output RF Connector	WR28 (for frequency range 29 to 31GHz) WR34 (for frequency range 25.25 to 27.5GHz)				
M&C Connector	MIL-C-26482-I compatible, Size 10, 6 pins female		MIL-C-26482-I compatible, Size 14, 19 pins female		
Size (mm)	195x165x85	275x200x150	340x270x180	320X475x 220	545x475x220
Weight	3.5 Kg	7 Kg	13 Kg	25Kg	35 Kg

POWER SUPPLY

	10W	20W	40W	60W	120W
Operating Voltage	24 VDC to 32 VDC (optional 110/220 VAC)			220 VAC	
Power Consumption	≤ 110W	≤ 220W	≤ 450W	≤ 900W	≤ 1800W

ENVIRONMENTAL

	10W	20W	40W	60W	120W
Operating temperature	-30°C to +55 °C				
Storage temperature	-40°C to +85°C				
Humidity	100%				

