KA band SSPA @34Ghz
TTI-SSPA-KA-i100W

Ka-Band SSPA Indoor for Deep Space Ground Stations

TECHNICAL SPECIFICATIONS

ELECTRICAL

Frequency band	34.2-34.7 GHz
Saturated Output Power (min)	50 dBm
Gain	60 dB min
Gain Flatness	±0.25dB/50MHz; ±1dB/500MHz
Gain stability at constant temperature	≤ ±0.5dB/24 hours @ 25ºC
Attenuation Adjustment Range	20 dB (0.25dB steps)
AM/PM conversion	
Up to P2dB	≤3º/dB
Group Delay	
Ripple	0.5 ns p-p max full band
Ripple	0.15 ns p-p max in any 50MHz sub-band
SSB Phase Noise	<-60 - 10 * log10(fhz) dBc/Hz: from 1 Hz to 1 MHz
	<-120 dBc/Hz: above 1 MHz
Noise Figure	<20dB
Input VSWR	≤1.3:1
Output VSWR	≤1.3:1
Spurious rejection	≤ -60dBc
2nd Harmonic rejection	≤ -60dBc

INTERFACES & PHYSICAL

Input RF connector	WR28
Output RF connector	WR28
Monitor Control	Serial RS485/RS232 & Ethernet
Size Width	19” compatible Rack
Size Height	20U
Weight	<100 Kg

POWER SUPPLY

Operating Voltage	Single-phase 220V AC±10%, 50Hz±5%
Power Consumption	≤ 1500W

ENVIRONMENTAL CHARATERISTICS

Operating Temperature	+18ºC to +28ºC
Storage Temperature	-30ºC to +70ºC
Operating Humidity	90% no condensation

Key Features

- Modular configuration
- Graceful degradation
- High reliability

TTI-SSPA-KA-i100W is an indoor high power solid state Power Amplifier at 34 Ghz. It provides the capability of remote M&C via serial port (RS232/ RS485) or Ethernet, including capabilities like alarms related to temperature, power supply shutdown, adjustable gain, forward and reverse output power monitoring and ALC.

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