

SSPA Electrical Specifications

Parameter	Symbol	Specification	Conditions
Operating Frequency Range	OFR	14.40 to 14.83 GHz	
Small Signal Gain		51 dB	
Power Gain flatness		1.0 dB	
Input / Output VSWR		1.1:1 / 1.8:1	
Output Power Variation Over Temp		0.1 dB	Per 10°C
Psat @ -5dBm Input		43-44 dBm	
Psat @ -5dBm Input		22-25 W	At rated Pout
Noise Figure		8 dB Maximum	
Power Added Efficiency		22 %	
DC Power		28 VDC	MIL-STD-704F Input
DC Current		4.5 Amps Maximum	Steady state and Inrush
Input Power		+5 dBm Maximum	

LNA Electrical Specifications

Parameter	Symbol	Specification	Conditions
Operating Frequency Range	OFR	15.15 to 15.35 GHz	
Small Signal Gain		25-33 dB	
Output Power 1dB		19 dBm	Assumes aircraft receives 2W max output from omni antenna at launch site.
Power Gain flatness		±0.6 dB	
Input / Output VSWR		1.43:1	
Noise Figure		<1.8 dB	@ 15 GHz
DC Power		28 VDC	
DC Current		0.15 Amps Maximum	Steady state and Inrush

Environmental Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	OTR	-20		+50	°C	

Mechanical Specifications

Parameter	Specification	Conditions
Dimensions	3.0" x 3.0" x 0.6"	Maximum
RF Connectors In/Out	SMA female	

Revision History

4/10/2025 – Revision 0: Initial Version