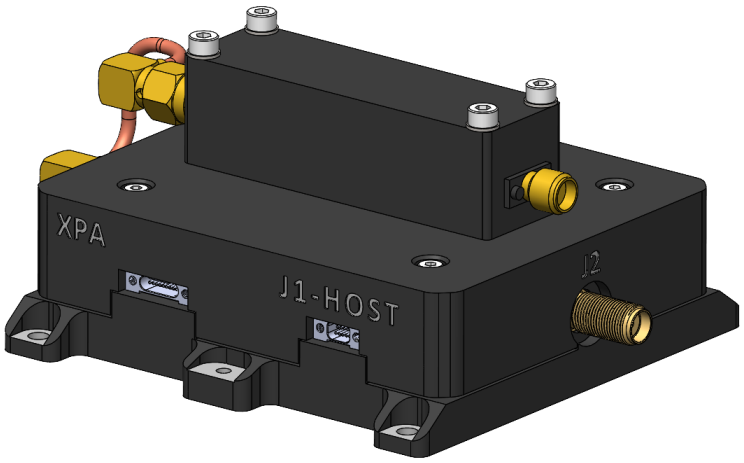
S/X POWER AMPLIFIERS

X-band and S-band Power Amplifiers to enhance SDR capability

Description

Our Wideband Power Amplifier, X-band Power Amplifier (XPA) and S-band Power Amplifier (SPA) provide additional RF power to assist systems designers in closing links with margin.

Our power amplifiers are designed to be self-contained with external PA disable and fault monitoring outputs as well as an RS-422 link for easy access to the control and status reporting functions. Our amplifiers are optimized to integrate easily with our SWIFT and RAVEN radio platforms.



Why TUI PAs?

High Power

Up to 35 Watts RF, adjustable output power

Low SWaP

(L) 90 x (W) 80 x (H) 28 mm (without filter) and 350 grams

Standard 28V bus input

Variable from 9 – 34 VDC

Telemetry/Status Monitoring

RS-422 interface

Specifications

Function			
Performance	Wideband Amp	X-band Amp	S-band Amp
Power Output (Psat)	9 W	35 W	30 W
Frequency Range	2 – 18 GHz	8 – 8.5 GHz	2 – 4 GHz
SWaP			
Size* (mm)	(L) 90 x (W) 80 x (H) 28	(L) 89 x (W) 78 x (H) 28	(L) 100 x (W) 100 x (H) 28
Mass*	< 350 grams	< 350 grams	< 500 grams
Input Voltage	9-34.6 VDC	9-34.6 VDC	9-34.6 VDC
DC Power Consumption (Operating at Psat -3 dBm)	30 W	65 W	50 W
Operating Temperature	-30C to +60C	-30C to +60C	-30C to +60C
Shock/Vibe	GSFC-STD-7000	GSFC-STD-7000	GSFC-STD-7000

*without harmonic filter

Interfaces

RS-422 telemetry
SMA Input
SMA Output

Features

31 dB of adjustable RF output power
NTIA/SFCG Mask Compliant
Temperature and Status Monitoring

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Tethers Unlimited, Inc.
11711 N. Creek Pkwy S., D113, Bothell WA 98011
425-486-0100 | info@tethers.com | www.tethers.com

Ka POWER AMPLIFIERS

Ka-band Power Amplifiers to enhance SDR capability

Description

The Ka-band Power Amplifier (KPA) provides an additional level of RF power to ensure link budgets close with margin.

Our power amplifiers are design to be easily integrated with our SWIFT and RAVEN radio platforms or used with other communications systems. Our amplifiers use an RS-422 telemetry and control link for power commanding and status reporting.

Why TUI PAs?

High Power

Up to 8 Watts RF, adjustable output power

Low SWaP

(L) 99 x (W) 78 x (H) 25 mm (without filter) and 340 grams

Standard 28V bus input

Variable from 9 – 34 VDC

Telemetry/Status Monitoring

RS-422 interface

Specifications

Function	Specification
Performance	
Power Output (Psat)	8 W
Frequency Range (Ka-band)	20 – 40 GHz
* V-band amplifier in development	
SWaP	
Size	(L) 99 x (W) 78 x (H) 25 mm
Mass	< 350 grams
Input Voltage	9-34.6 VDC
DC Power Consumption (Operating at Psat -3 dBm)	80 W
Operating Temperature	-30 C to +60 C
Shock/Vibe	GSFC-STD-7000

Interfaces

- RS-422 telemetry
- SMA Input
- SMA Output

Features

- 31 dB of adjustable RF output power
- NTIA/SFCG Mask Compliant (with appropriate harmonic filter)
- Temperature and Status Monitoring

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