



NEW



New Stellar Mini “L” Version Small, Lightweight, Efficient 180W Ku Band (AC Input) BUC with **Twice* the useable **POWER!****

Since our acquisition of the Stellar™ satellite amplifier product range, we have focused on making major improvements across all areas of customer service and support. We are also continually re-engineering existing designs and introducing new products to deliver superior performance, enhanced reliability and maximum efficiency across all uplink amplifier segments.

NEW: In addition to our standard 180W Ku-band StellarMini™ amplifier, we are introducing a “L” version which offers twice the useable power.



**Available in single thread and Redundant
sub-system designs
with single thread and redundant controllers**

* Compared with Standard Mini non-linearised

StellarMini “L” Version STA3318Ku1DUL

**Frequency Range 13.75 to 14.5 GHz
HPA Output 150W
with internal L-Band BUC & 10 MHz
Auto-sense reference**

**Size: 13 3/4" (349mm) x 7 1/4" (184mm)
x 5 1/4" (133mm)
Weight: 19.8lbs (9.0kg)**

STA3318KU1 Performance Data (Standard & New “L” Version)

PERFORMANCE (Without Upconverter)

Frequency range:		
standard - KU1	13.75 to 14.5	GHz
Output power:		
TWT output flange	175	W min
HPA rated output	150	Wmin
Gain:		
at rated power (A, D option)	61	dB min
SSG P« «-10dB (A, D option)	66	dB min
Attenuation range (D option).....	25	dB min
Gain variation:		
over any 80 MHz band	1.0	dB max
slope	0.1	dB/MHz max
Gain stability 24hrs (constant drive, temperature and load).....	0.5	
Gain stability over full operating temperature..	2.0	
Intermodulation (two equal carriers) with total output = (Standard Mini) P _{rated} -4 dB:	-18 dBc max	dBc max
(XL Mini) P _{rated} -4 dB:	-28 dBc max	
performance with harmonic output	-60	
AM to PM conversion at P _{med} -6 dB	2.5 %/dB	
Noise power:		
transmit band	-70	dBW/4 kHz max
receive band, 10.95- 12.75 GHz-standard	-150	dBW/4 kHz max
Residual AM:		
< 10 kHz.....	-50	dBc max
10 kHz< f <500 kHz	-20(1.5+log f)	dBc max
>500 kHz	-85	dBc max
Group delay:		
linear	0.01	ns/MHz
parabolic	0.005	ns/MHz ²
ripple	1.0	nsp-p
Phase noise:		
continuous.....	10 dB lower than IESS phase noise profile	
AC fundamental	-50	dBc
sum of all spurs.....	-47	dBc
Input VSWR (operating).....	1.3:1	max
Output VSWR (non-operating)	1.3:1	max
Load VSWR, no damage.....	2.0:1	max

ELECTRICAL

Prime power.....	single phase, line-neutral or line-line	
Voltage.....	99 to 265	V
Frequency	47 to 63	Hz
Power requirement.....	850	VA max
Power factor	0.95	min

MECHANICAL

Weight.....	9.0 kg (19.8 lb) typ
Dimensions	see outline
Cooling.....	integral forced-air

CONNECTORS

RF input.....	N-type female
RF output	PBR120 with 6-32 UNC 2B threaded holes
RF sample port.....	N-type female
Prime power.....	Amphenol T3110-000
Control interface	62GB-12E-18-32-PN

Note: Mating connectors for the mains supply and control interface are supplied.

ENVIRONMENTAL

The amplifier complies with EU Directive 2002/95/EC, the RoHS Directive, restricting the use of hazardous substances in electronic equipment.

The amplifier falls within the scope of EU Directive 2002/96/EC, the WEEE Directive, governing disposal at end of life. Users should contact Spacepath Communications or their distributors for disposal information.

?rating temperature.....	-40 to +55	°C
Derating.....	2 °C/300 m above sea level	(3.6°F/1000ft)
Solar gain.....	1120	W/nrv
Storage temperature	40 to +85	°C
Relative humidity (condensing)	100	%
Altitude:		
operating	4.5 km (15,000 ft) max	
non-operating	12 km (40,000 ft) max	
Vibration/shock	BS EN 60721-3-2 Level 2M3	

For operation outside these parameters, refer to Spacepath Communications for guidance.

OPTIONS

- **L-Band Internal Block up converter, 10MHz Auto Sense reference.**
- **Break-out link for upconverter**
- **Single thread and redundant controllers**
- **1:1 Redundant sub-system design.**