

## NEW GENERATION OF GAN BASED SSPAS/BUCS FOR BROADCAST SATCOM

Using cutting-edge **GaN technology**, the new Ku SSPA family offers outstanding performance in outdoor operations

### MULTICARRIER OPERATION

No memory effects and limited back off guaranteeing **unlimited carriers**.

### MODULARITY

A combination in phase of SSPAs 600 W delivers **output powers up to a few kW**s on a built-in redundancy and hot swappable amplification modules.

### EFFICIENCY & RELIABILITY

**Super linearity** for maximum useable output power to provide customised linearisation independent of the modulation method used.

**Robust performance** guaranteed through individual unit testing over temperature at factory. Built-in output isolator for protection against reflected power.

**Advanced packaging** and cooling techniques enable the equipment to be operated in the toughest environments.

### MONITORING & CONTROL

**Full M&C capability** through RS-485/USB (ASCII commands) or with the option of an Ethernet port (Telnet, HTTP with embedded user-friendly web page or SNMP).

Discrete lines for mute and turn on/off functions and a summary alarm (Form C relay and discrete) for speedy operation.



## KEY FEATURES

- \* Super extended frequency band
- \* Highly efficient
- \* Super high linear power
- \* Multicarrier operation
- \* Superior lifetime based on GaN-tech
- \* High MTBF
- \* Detachable power supply module
- \* Redundant configurations (1:1, 2:1, N:1)
- \* OPEX savings
- \* Weatherproof
- \* Compact design
- \* Simple operation & maintenance

ELECTRICAL

Operating frequency range	12.75-13.25 GHz & 13.75-14.50 GHz (simultaneously)
Output power ( $P_{SAT (typical)}$ )	57.8 dBm
Linear output power ( $P_{LINEAR*}$ )	56.8 dBm
Gain	>65 dB
Gain flatness	<3 dB p-p @12.75-13.25 GHz & @13.75-14.5 GHz, <1 dB peak to peak any 40 MHz
Gain variation over temperature	$\pm 1.5$ dB over full operating range
Attenuation adjustment range	25 dB in 0.10 dB step
Input VSWR	$\leq 1.5:1$
Output VSWR	$\leq 1.3:1$
Spectral regrowth	-25 dBc @ $P_{LINEAR*}$
Spurious	-60 dBc max @ $P_{LINEAR*}$

\* For single carrier with modulation DVB-S, 4Mbaud, roll-off: 0.25, ModCod QPSK-3/4, occupied bandwidth 5MHz, measured @1.0x symbol rate

POWER SUPPLY

Input voltage	90-264 VAC, 50-60 Hz
Power consumption @ $P_{SAT}$	2600 W

INTERFACES & PHYSICAL

Dimensions (L x W x H)	550 x 360 x 280 mm
Weight	68 Kg
Interfaces	RF Input: SMA (f) RF Output: WR75 grooved / RF sample: SMA (f) AC Line: 3-pin MIL circular (RT00144PNH) M&C: 19-pin MIL circular (UT0016-19SH)

MONITOR & CONTROL

Remote control	RS-485
Monitor parameters	Forward & Reverse output power / Input power / Temperature / Summary alarms
Internal self protection	Temperature (>85 °C) / Reflected power / High input-output power

ENVIRONMENTAL

Operating temperature	-30 °C to +55 °C
Storage temperature	-40 °C to +85 °C
Humidity	100 % condensing



OTHER FEATURES

- \* Automatic Control Mode: AGC, ALC
- \* Pressure window
- \* Output RF calibrated sample port

OPTIONS

- \* Ethernet port
- \* Extended temperature range: -40 °C, +55 °C
- \* Redundant systems 1:1, 2:1, N:1
- \* Indoor controller
- \* Receive reject filter (external)
- \* Harmonic filter (external)
- \* SNMP
- \* High stability internal reference

ACCESSORIES & SPARES

- \* Set of fans
- \* Detachable power supply

CONTACT

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NOTICE

Information contained in this document is subject to change without notice.  
Unless otherwise specified, tests have been done at 23 °C.