

New generation of SSPAs/ BUCs for load pull & satellite communications



USING CUTTING-EDGE TECHNOLOGY, THE NEW Q SSPA/BUC FAMILY OFFERS OUTSTANDING PERFORMANCE IN OUTDOOR OPERATION



Innovative technology

State-of-the-art technology offering the very **highest output power** with wideband at Q band: **40-46 GHz in sub-bands of 500 MHz**. Outstanding performance within a compact packaging.

Efficiency & Reliability

Reliable and versatile technology. Options to increase the number of power stages and achieve higher output powers, as well as other frequency bands.

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

- * Satcom & load-pull applications
- * Highly efficient
- * Superior lifetime
- * High MTBF
- * Redundant configurations (1:1, 2:1, N:1)
- * Weatherproof
- * Compact design
- * Simple operation & maintenance



OPTIONS

- * Ethernet port
- * Extended temperature range: -40 °C to +60 °C
- * Monitoring: forward & reverse output power
- * Redundant systems
- * Remote M&C Panel
- * Automatic Control Mode: AGC, ALC
- * Output RF calibrated sample port
- * SNMP

ACCESSORIES & SPARES

- * Set of fans

RF performance

Input frequency range	950-1450 MHz
Operating frequency range	43-43.5 GHz
Output power (P_{SAT} (typical))	44 dBm
Gain	>60 dB
Gain flatness	± 1.5 dB p-p max (SSPA) / ± 0.5 dB p-p max over any 40 MHz
Gain stability over 24 hours	± 0.25 dB @ constant temperature
Gain variation over temperature	± 2 dB over the whole range
Attenuation adjustment range	30 dB in 0.25 dB steps
Input VSWR	<1.5:1
Output VSWR	<1.3:1
Mute	>60 dB
Phase noise	As per IESS-308/309
External ref. freq. & phase noise	10 MHz / 0 dBm ± 5 dB. Multiplexed on L-band input SMA (F) 50 Ω upon request
Spurious	<-60 dBc

Power Supply

Input voltage	264 VAC, 50-60 Hz
Power consumption @ P_{SAT}	495 W

Interfaces & Physical

Dimensions (L x W x H)	340 x 210 x 170 mm
Weight	12.3 kg
Interfaces	Input (L-band + external reference): N-type (f) Output: WR22 UG-383/U or UG599/U AC Line: 3-pin MIL circular M&C: RS-485, Ethernet upon request

Monitor & Control

Remote control	RS-485/USB
Monitor parameters	Input power / Temperature / Summary alarms
Internal self protection	Temperature (>75 °C) / Input level / Reflected power

Environmental

Operating temperature	-30 °C to +55 °C
Storage temperature	-40 °C to +85 °C