CELESTIA | TTi

Q SSPA
25W
Outdoor

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 1.5 GHz**. 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 based on GaN-tech
* High MTBF
* Redundant configurations (1:1, 2:1, N:1)
* Weatherproof
* Compact design
* Simple operation & maintenance

CELESTIA | TTI

TECHNICAL SPECIFICATIONS

Q SSPA

25W

Outdoor

ELECTRICAL

Operating frequency range	45 - 46.5 GHz (other sub-bands upon request)
Output power ($P_{SAT\ (typical)}$)	44 dBm (45-46.5 GHz)
Gain	>70 dB
Gain flatness	± 1.5 dB p-p max over any 40 MHz
Gain stability over 24 hours	± 0.25 dB @constant temperature
Gain variation over temperature	± 1.5 dB over the whole range
Attenuation adjustment range	25 dB in 0.1 dB steps
Input VSWR	<1.5:1
Output VSWR	<1.3:1
Mute	>45 dB
Spurious	<-60 dBc

POWER SUPPLY

Input voltage	90-264 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	12.6 kg
Interfaces	Input: WR22 (UG599/U or UG-383/U)
	Output: WR22 (UG599/U or UG-383/U)
	AC Line: 3-pin MIL circular
	M&C: RS 4885, Ethernet upon request

MONITOR & CONTROL

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

ENVIRONMENTAL

Operating temperature	-30 ºC to +55 ºC
Storage temperature	-40ºC to +85ºC

OPTIONS

* Ethernet port
* Extended temperature range: -40 ºC to +60 ºC
* 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

TTI CONTACT

sales@ttinorte.es
www.ttinorte.com

Rev. 2 01/24