

High Power rack-mounting SSPAs

Codan's high power series of rack-mounting C-Band and Ku-Band SSPAs offer a wide range of distinctive advantages and enhanced features for satellite communications systems.

KEY FEATURES

Output power

The C-Band SSPAs offer output power ratings of 60, 120 and 240 watts while the Ku-Band SSPAs are rated at 40 and 80 watts.

Durability

The SSPAs are designed and tested to meet their performance specifications in an ambient temperature range from -10°C to $+50^{\circ}\text{C}$. Field experience indicates that MTBFs of greater than 60,000 hours can be expected.

RF performance

RF performance is superb, particularly: intermodulation performance, gain stability over temperature and flatness across the RF band.

These SSPAs also boast industry leading spurious and harmonics specifications, while guaranteed RF performance ensures expensive system link margins do not have to be used to cope with SSPA RF performance variations. The high linearity and low spurious characteristics contribute to superior multi-carrier performance.

Power consumption

Codan's high power SSPAs feature a unique, low loss, efficient waveguide power combiner which results in low power consumption and low temperature rise. This ensures internal components do not suffer undue stress.

Power supply

All the high power SSPAs are AC mains powered and operate from either 115 V AC or 230 V AC.

Internal protection

Internal protection against high temperature and short or open circuit RF output is standard.

ADVANCED FEATURES

Local control

A user-friendly, menu driven keypad and LCD display is provided for operator control and monitoring of the SSPA. The operating configuration is stored in EEPROM to ensure the setup parameters are restored in the event of a power failure.

Enhanced monitor and control

All operating functions can also be controlled and monitored via the serial M&C interface. Functions that can be monitored include RF output power, heatsink temperature and internal supply rail voltages. The serial interface can also be used to perform a self test, mute the SSPA, and set the gain and maximum/minimum RF power alarm thresholds.

Redundancy switching system

Codan's redundancy switching systems can provide automatic changeover to standby SSPAs, maximising availability and minimising any disruption to service.

The 9070 based system provides rack-mounted redundancy control with extensive M&C facilities, and either 1:1 or 1:2 redundancy switching.



C-Band 9624H 240 W SSPA

The SSPA can be supplied with a standard RS232 interface, or the optional RS422 or RS485 interfaces.

MAJOR CONFIGURATION OPTIONS

Frequency bands

C-Band	5.850–6.425 GHz
Ku-Band	14.0–14.5 GHz

Output powers (C-Band)

9660	60 W
9612H	120 W
9624H	240 W
WR137 waveguide output standard	

Output powers (Ku-Band)

9440	40 W
9480	80 W
WR75 waveguide output standard	

C-Band SSPA redundancy systems

9070A	1:1 SSPA redundancy system for 9660/9612H 60/120 W rack-mount SSPAs
9070B	1:1 SSPA redundancy system for 9624H 240 W rack-mount SSPA
9070C	1:2 SSPA redundancy system for 9660/9612H 60/120 W rack-mount SSPAs
9070D	1:2 SSPA redundancy system for 9624H 240 W rack-mount SSPA

Ku-Band SSPA redundancy systems

9070E	1:1 SSPA redundancy system for 9440 40 W rack-mount SSPA
9070F	1:1 SSPA redundancy system for 9480 80 W rack-mount SSPA
9070G	1:2 SSPA redundancy system for 9440 40 W rack-mount SSPA
9070H	1:2 SSPA redundancy system for 9480 80 W rack-mount SSPA

CODAN QUALITY AND SERVICE

The SSPAs are built and tested in Codan's ISO9001 quality certified manufacturing facility, and undergo 100% burn in and performance testing.

Codan's fully trained staff and agents provide in-factory and in-country training services, and complete installation and on-site assistance. This service is backed up by a 24 hour customer service line and a warranty of three years on manufacturing, design or component defects.



Front view of 1:2 SSPA redundancy system

Equipment descriptions and specifications are subject to change without notice or obligation



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