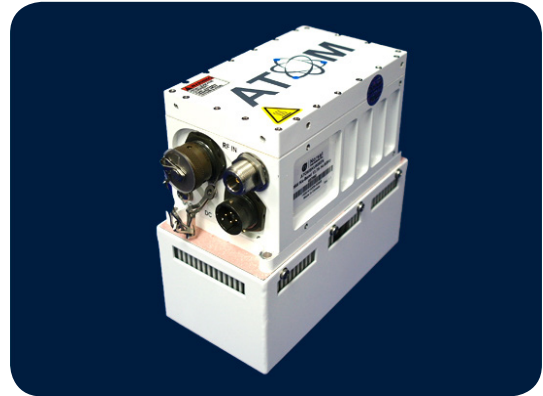




SSPA KU-BAND 20W ATOMSKU020



NORSAT ATOM SERIES SSPAS

Compared to equivalent products, ATOM series SSPAs are:

- Up to 68% smaller and lighter
- Up to 60% more power efficient
- More flexible with RF and configuration options

The Norsat ATOM series of solid state power amplifiers (SSPA) are among the smallest, lightest, and most energy efficient transmitters available. The high efficiency of ATOM reduces power consumption significantly, delivering considerable operational cost savings over the lifetime of the device.

OPTIONS

The following items are standard:

White paint, N-Type input connector, WR-75 waveguide output, Fan cooling, DC Power.

Available options include:

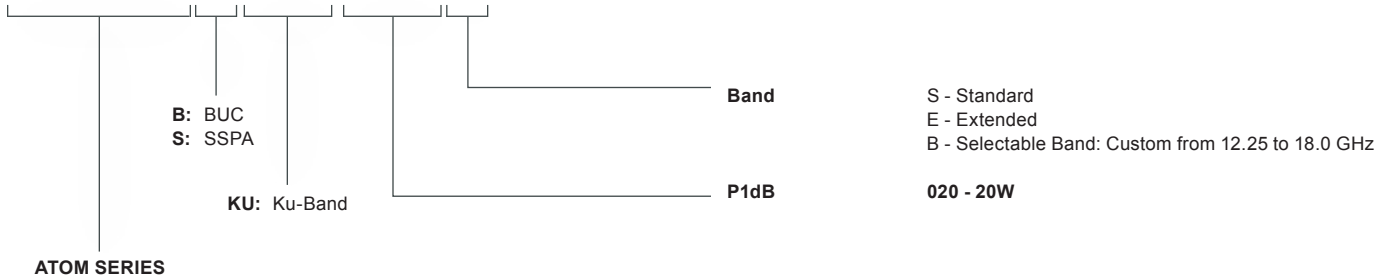
Baseplate Cooling, Surge + Protect Filter, SMA Input Connector, WR-62 Waveguide Output.

Accessories:

Power supply, Bracket, Waveguides, Cables, Adaptors

HOW TO ORDER

ATOMSKU020S



KU-BAND 20W SSPA-ATOMSKU020

RF SPECIFICATIONS

Frequency Band (GHz)	13.0-13.75	13.75-14.5	14.5-15.0	15.0-16.0
<i>*For Selectable Band units, specifications are only guaranteed for one band.</i>				
Rated Power Output (P1dB)	20W	20W	18W	18W
Noise Figure in-band	18 dB	18 dB	18 dB	18 dB
Fwd Monitor (15 dB Range) @ CF	±1.0 dB	± 1.0 dB	± 1.0 dB	± 1.0 dB
Gain (min)	50 dB	50 dB	50 dB	46 dB
Gain variation over operating band	8 dB max p-p	6 dB max p-p	6 dB max p-p	7 dB max p-p
Gain variation over any 40 MHz	2 dB max p-p	2 dB max p-p	2 dB max p-p	3 dB max p-p
Gain variation over temperature	3 dB max p-p	3 dB max p-p	3 dB max p-p	3 dB max p-p
Gain variation over time	0.5 dB/day	0.5 dB/day	0.5 dB/day	0.5 dB/day
Input VSWR	1.5:1	1.5:1	1.5:1	1.5:1
Output VSWR	2.0:1	2.0:1	2.0:1	2.0:1
w/optional output isolator (derate power by 0.4 dBm)	1.4:1	1.4:1	1.4:1	1.4:1
Spurious @ rated power	-60 dBc	-60 dBc	-60 dBc	-60 dBc
AM/PM Conversion @2dB below rated power	2.5°/dB	2.5°/dB	2.5°/dB	2.5°/dB
2nd Harmonic @ 3dB below rated power	-45 dBc	-45 dBc	-45 dBc	-45 dBc
3rd order IMD @ 3dB max. backoff from rated power	-25 dBc	-25 dBc	-25 dBc	-25 dBc

POWER

Input Voltage	20 – 56 VDC
Power Consumption with fans	155W @ Psat 140W @ P1dB 118W @ 3dB backoff from P1dB 110W @ Quiescent (no signal input) 20W muted
Power Connector	MIL-26482 Series 1 receptacle Shell size 12, 4 pins

*Optional AC Power Supply

ENVIRONMENTAL & PHYSICAL

Operating Temperature with fans	-40° to +60°C (-40° to +140°F)
Storage Temperature	-54° to +80°C (-65° to 176°F)
Outline Dimensions	170 x 86 x 157 mm (6.5 x 3.2 x 6.1")
Weight	2 kg (4.5 lbs)
Humidity	100% condensing

INTERFACES

RF Input Connector	N-Type
RF Output Connector	WR-75 (WR-62 above 15.5 GHz)

MONITOR & CONTROL

M&C Interface	RS-232 & RS-485
M&C Connector	MIL-26482 Series 1 Receptacle, Shell Size 12, 10 Pins
Mute Control	Fully configurable (mute enable: high or low, mute default: enabled or disabled)
Low	0.0 - 0.8V
High	3.0 - 5.0V
Thermal Shutdown Temperature	90°C (Accuracy ± 3°C)

MECHANICAL DIAGRAM

