

## SAS 200 Series

The SAS-200 series antennas are dual-band omnidirectional antennas with a discone low-band construction, and either a conical monopole for the 3 GHz configuration or vertical biconical for the 6 GHz and 18 GHz configurations. These antennas are available with a diplexed output option or high- and low-band output. Additional high vibration (HV) and high power (HP) options are available for offroad vehicular-mounted applications and high power requirements.

The SAS-200 series is available as passive units, or with preamplifier options and RF bypass capability. When active, the AC powered PFS-SAS is suggested to power and control the SAS-230 and SAS-260 configurations. This series can be used for either spectrum monitoring/surveillance or military and security jamming.

SAS-200 Antenna



### Specifications and Configurations

	SAS-230	SAS-260	SAS-218
<b>Frequency</b>	Low band: 20 to 1000 MHz High band: 800 to 3000 MHz	Low band: 20 to 1000 MHz High band: 1000 to 6000 MHz	Low band: 20 to 1000 MHz High band: 1 to 18 GHz
<b>Polarization</b>	Vertical	Vertical	Vertical
<b>Gain</b>	125 to 1000 MHz: -5 to +3 dBi High band: -1 to +3 dBi	125 to 1000 MHz: -5 to +3 dBi High band: -1 to +3 dBi	125 to 1000 MHz: -5 to +3 dBi High band: -1 to +3 dBi
<b>Impedance</b>	50 Ω	50 Ω	50 Ω
<b>VSWR* (low band)</b>	2.0:1 typical 7.0:1 max	2.0:1 typical 7.0:1 max	2.0:1 typical 7.0:1 max
<b>VSWR* (high band)</b>	1.5:1 typical 3.0:1 max	2.0:1 typical 3.0:1 max	2.0:1 typical 3.0:1 max
<b>Pattern</b>	Omni in azimuth	Omni in azimuth	Omni in azimuth
<b>Operating Temperature</b>	-32° to +55°C	-32° to +55°C	-32° to +55°C
<b>Storage Temperature</b>	-47° to +85°C	-47° to +85°C	-47° to +85°C
<b>Power Handling</b>	Low band: 300+W CW High band: 270W CW	Low band: 150W CW High band: 35W CW	Low band: 150W CW High band: 15W CW
<b>Shock Handling**</b>	20 g	20 g	20 g
<b>Antenna Connectors</b>	Type-N Female	Type-N Female	Type-N Female

\*VSWR figures shown are approximate and can change based on antenna mounting.

\*\*Configurations with shock handling up to 40 g are also available.

## PFS-SAS DC Power Supply

This unit is a linear DC power supply that can be configured for either 120V AC or 240V AC, single-phase, 50/60 Hz input power. The output from this supply is 18V DC. This unit has been designed to provide the required input power for the bypass switches and low-noise amplifiers used in the SAS-230 and SAS-260 active surveillance antennas. There are separate switches to control the low and high bands of the antennas separately.



## PFS-SAS Specifications

<b>Size:</b>	7.4" x 7.4" x 2.6" (188 mm x 188 mm x 67 mm)
<b>Weight:</b>	3.5 lbs (1.6 kg)
<b>Power Input:</b>	85 to 264V AC 50/60 HZ
<b>Output Power:</b>	+18V DC at power supply (+15V DC minimum required at antenna input)
<b>Output Control:</b>	(Both bands) TTL
<b>Output Connector:</b>	MS3116F12-10P

## SAS-200 Series Key

"A": Describes output type	"1" = Single Type-N output
	"2" = Dual Type-N outputs
"B": Describes completely passive vs. range of active units	"0" = Completely passive
	"1" = Single amplifier low-band
	"2" = Dual amplifier
	"S" = Latching switch for preamplifier bypass capability
	"2FS" = Two failsafe switches and two preamplifiers for bypass capability
"C": Represents addition of limiters	"2R" = Receive-only capability
	"L2" = Two limiters

\*HP denotes high power    \*\*HV denotes high vibration

**Examples** **SAS-230HV-22FSL2:** 20 MHz to 3 GHz omnidirectional antenna with dual-band output and a high- and low-band preamplifier section, bypassable using two failsafe switches

**SAS-230HV-12FSL2:** 20 MHz to 3 GHz omnidirectional antenna with single diplexed output and a high- and low-band preamplifier section, bypassable using two failsafe switches



## SAS-200 Antenna Features:

- 18" dia x 18" tall
- 14 to 21 lbs
- ABS radome
- Available in desert tan, OD green, and white
- Made in the USA

## SAS-200 Configurations



Available Configurations		
SAS-218-20	SAS-230-22	SAS-260-10
SAS-218HP-20	SAS-230-22FSL2	SAS-260-10L2
SAS-218HV-20	SAS-230-22R	SAS-260-12
SAS-218HV-201	SAS-230-22SL2F	SAS-260-12FSL2
SAS-230-10	SAS-230-C2934-3	SAS-260-20
SAS-230-104	SAS-230-C2934-4	SAS-260-22FSL2
SAS-230-12	SAS-230HV-10	SAS-260HV-10
SAS-230-105	SAS-230HV-12	SAS-260HV-10L2
SAS-230-12	SAS-230HV-12FS	SAS-260HV-12FS
SAS-230-12FS	SAS-230HV-12L2	SAS-260HV-12RL2
SAS-230-12FSL2	SAS-230HV-20	SAS-260HV-20
SAS-230-12L2	SAS-230HV-201	SAS-260HV-201
SAS-230-12RL2	SAS-230HV-22	SAS-260HV12FSL2
SAS-230-20	SAS-230HV12FSL2	SAS-260HV22FSL2
	SAS-230HV22FSL2	

