



SAS-200 SERIES







The **SAS-200 Series** are dual band omni antennas with a discone low-band construction and either a conical monopole for the 3 GHz configuration or vertical biconical for the 6GHz and 18GHz configurations. These antennas are available with a diplexed output option or a 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 (see page 3).

This series can be used for either spectrum monitoring/surveillance or military and security jamming.



- 18" Diameter x 18" Tall
- 14 to 21 lbs
- ABS Radome
- Available in Desert Tan, OD Green, White
- Made in the USA

Revised October 2020

Specifications		
Gain	Low Band: -5 to +3 dBi, 125 to 1000 MHz High Band: -1 to +3 dBi	
Polarization	Vertical	
Impedance	50 Ω	
Pattern	Omni-Directional in Azimuth	
Operating Temperature	-32° to 55° C	
Storage Temperature	-47° to 85° C	
Power Handling	Low Band: 150 to 300+ W CW High Band: 35 to 270 W CW	
Antenna Connectors	N-type Female	

Configurations				
	SAS-230	SAS-260	SAS-218	
Frequency	Low Band: 20 to 1000 MHz	Low Band: 20 to 1000 MHz	Low Band: 20 to 1000 MHz	
	High Band: 800 to 3000 MHz	High Band: 1000 to 6000 MHz	High Band: 1 to 18 GHz	
VSWR*	Low Band 7.0:1 Max, 2.0:1 Typical	Low Band 7.0:1 Max, 2.0:1 Typical	Low Band 7.0:1 Max, 2.0:1 Typical	
	High Band: 3.0:1 Max, 1.5:1 Typical	High Band: 3.0:1 Max, 2.0:1 Typical	High Band: 3.0:1 Max, 2.0:1 Typical	
Power Handling	Low Band: 300+ W CW	Low Band: 150 W CW	Low Band: 150 W CW	
	High Band: 270W CW	High Band: 35W CW	High Band: 15 W CW	
Shock Handling**	20 G	20 G	20 G	

^{*}VSWR figures shown are approximate and can change based on antenna mounting.

The data described herein is subject to licensing under the International Traffic Arms Regulations (ITAR) 22 CFR Parts 120-130. This data sheet has been released into the public domain in accordance with these regulations.

^{**}Shock handling up to 40 G configurations are available.



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PFS-SAS DC Power Supply:

This unit is a linear DC Power Supply that can be configured for either 120VAC or 240VAC, single phase, 50-60 Hz input power. The output from this supply is 18 VDC. 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.

Specifications		
Size	7.4" x 7.4" x 2.6" 188 mm x 188 mm x 67 mm	
Weight	3.5 lbs 1.6 kgs	
Power Input	85 VAC to 264 VAC 50 Hz to 60 Hz	
Output Power	+18 VDC at Power Supply (+15 VDC minimum required at antenna input)	
Output Control	TTL for Low Band TTL for High Band	
Output Connector	MS3116F12-10P	



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Key: SAS-2XX-ABC				
All Describes Output Type	"1" = Single N-Type Outputs			
'A": Describes Output Type	"2" = Dual N-Type Outputs			
	"0" = Completely Passive			
	"1" = Single Amplifier Low Band			
'B": Describes Completely Passive vs. Range of Active Units	"2" = Dual Amplifier			
of Active Offics	"S" = Latching Switch for Preamplifier Bypass Capability			
	"2FS" = Two Failsafe Switches and Two Preamplifiers for Bypass Capability			
	"2R" = Receive Only Capability			
C": Represents Addition of Limiters	"L2" = Two Limiters			
HP denotes High Power *HV denotes High Vibration				

Examples			
SAS-230HV-22FSL2	SAS-230HV-12FSL2		
20 MHz to 3 GHz omnidirectional antenna with dual band output and a high and low band preamplifier section, bypassable using two failsafe switches.	20 MHz to 3 GHz omnidirectional antenna with single diplexed output and a high and low band preamplifier section, bypassable using two failsafe switches.		

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