

Features & Benefits:

- Supports Return, and Forward applications
- Low Insertion Loss
- Flat Frequency Response
- High Isolation
- Optionally high quality splitter
- Variety of applications
- More than 40 dB dynamic Range of Input Signal without any Adjustments
- Easy initial set up
- Maximum 6 dB additional Insertion Loss for Redundant Amplifier configuration
- Fast Time Response
- Allows for site design consistency

The new **SAS-101** universal stand alone RF sensing Switch is designed primarily for applications in modern cable television headends and hub site environments.

The device occupies only one half of a single 19" 1RU space including a self contained Power Supply, and RF Sensing Switch with wide dynamic range of Input Signal.

The unique mechanical structure of the unit allows for mounting within a modular headend passive frame. It can accommodate chassis which range in height from 1RU to 5RU, and is ideally suited for a variety of applications.

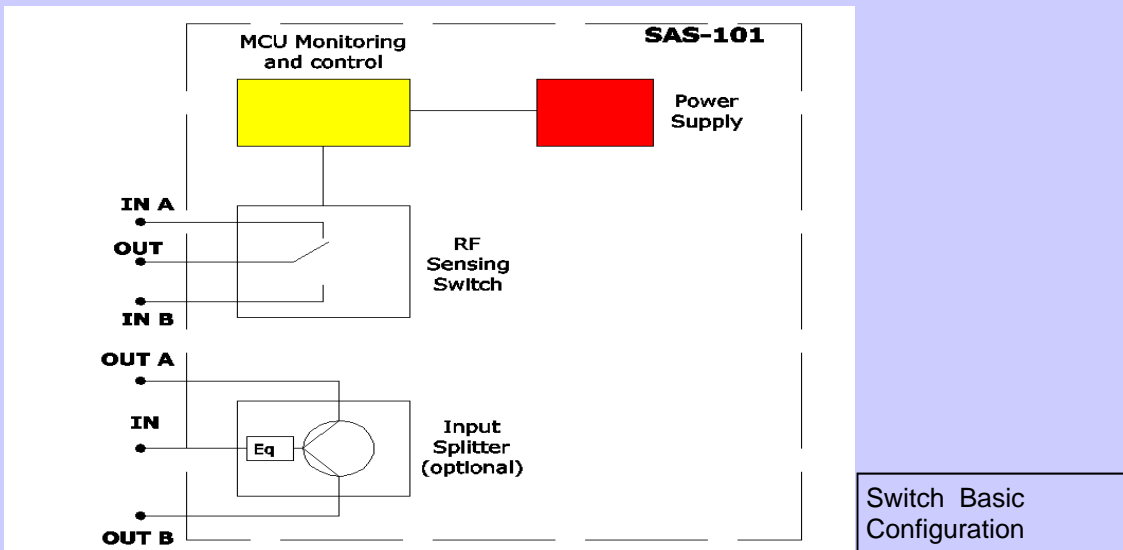
The RF Sensing Switch works in frequency range 5-1002 MHz and cover Forward and Return Path applications where alternative source of signal can be installed.

New fully digital monitoring circuitry provide calculations of RF power at each input and switching from primary input A to input B if found that signal in primary input drops below signal in input B more than installed Threshold. The Threshold levels **Low, Mid and High** are approximately equal 1, 3 and 9 dB correspondingly. Special calibration procedure determinate power sensitivity of RF detectors and eliminate non ideal parameters of components at each input. All calibration data saved in non volatile microcontroller memory.

Additional **INPUT SELECTOR** switch is provided to allow for manual selection of settings from the input to output or **AUTO** input pick up depending on physical position of the selector switch.

Powering for the **SAS-101** is available in two varieties:

1. Universal AC power supply, Input voltage range 94 – 240 VAC;
2. – 48 VDC power supply. Input voltage range from -36 VDC to -72 VDC.

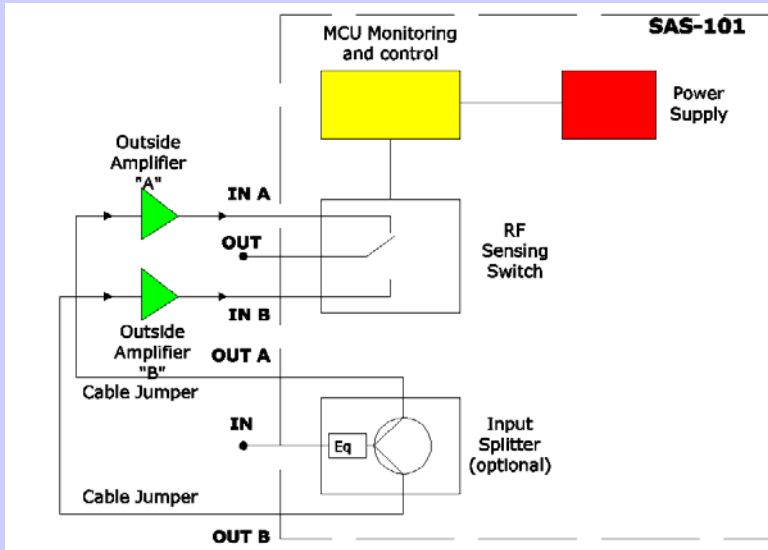


Technical Specifications

RF Sensing Switch:

<i>Parameter</i>	<i>Unit</i>	<i>Specification</i>
Frequency Band	MHz	5 - 1002
Impedance	Ohm	75
Connectors Type		F-connector
Number of Inputs		2
Number of Outputs:		1
Insertion Loss, max	dB	1.5
Insertion Loss Flatness	dB	±0.25
Return Loss, all Ports, min	dB	20
Isolation, min	dB	60
Signal Input Level:	dBm	
min		-20
max		22
Threshold Level between Inputs *	dB	1, 3 or 9
Switching Time, max	ms	10
Power Supply:		
Universal	VAC	90-240/50-60Hz
Negative (optional)	VDC	- 48
Dimensions (WxHxD)	inch	8"x1.7"x8"
Weight	lb	2.0

*) Threshold Level sets up by customer



Redundant Amplifier Configuration

Splitter:

Parameter	Unit	Specification
Frequency Band	MHz	5 - 1002
Impedance	Ohm	75
Connectors Type		F-connector
Number of Inputs		1
Number of Outputs:		2
Insertion Loss, max	dB	4.0
Insertion Loss Flatness	dB	±0.5
Return Loss, all Ports, min	dB	20
Isolation between Outputs, min	dB	30

*) Threshold Level sets up by customer

*Built in Equalizer compensates frequency slop of Splitter and RF Switch Insertion Loss.
Maximum insertion loss of RF Switch and Splitter connected together not exceeds 6 dB at 1002 MHz.*

CommDev manufactures products designed by engineers for engineers!