



### Features and Benefits:

- Supports Return, and Forward path applications
- Low Insertion Loss
- Flat Frequency Response
- High Isolation
- Optional high quality splitter
- Variety of applications
- More than 40 dB dynamic Range of Input Signal without any adjustments
- Easy initial set up
- Maximum 7 dB additional Insertion Loss for Redundant Amplifier configuration
- Fast Time Response
- Allows for site design consistency

**THREE YEAR  
MANUFACTURER PARTS  
AND LABOR WARRANTY  
INCLUDED**

The new **SAS-103** dual stand alone RF sensing Switch is designed primarily for L-band Management applications in a cable television headend or hub site environment, although its capabilities offer opportunity for usage in other situations.

The device occupies a single 19" 1RU space which includes a self contained Power Supply, and two wide dynamic range RF Sensing Switches for flexible input signal conditions and optionally two 2-way Splitters.

The RF Sensing Switch itself operates within the frequency range of 950-2150 MHz. The full specification for each RF Sensing Switch and Optional 2-way Splitter added below.

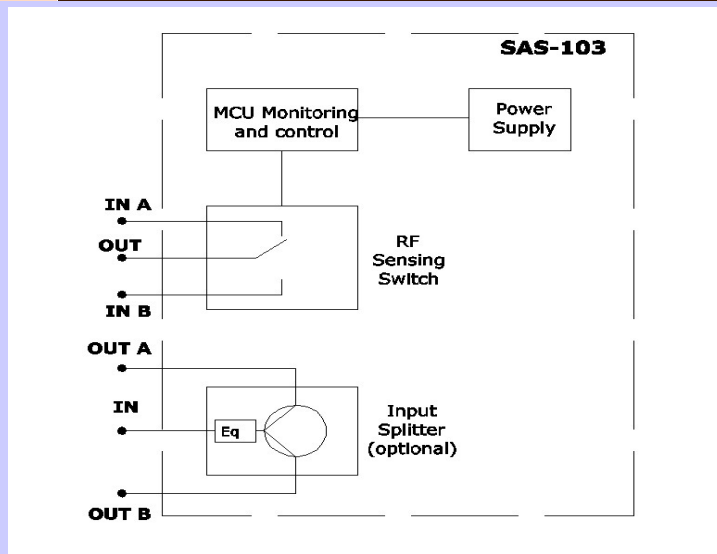
The completely new digital circuit design and its' monitoring circuitry will calculate the RF power at each input. A switching condition from primary input A to input B will occur if it is determined that the primary signal input falls below the signal level of input B and exceed the set threshold level. The Threshold level settings are **Low**, **Mid** and **High** and are approximately equal to 1, 3, and 9 dB correspondingly. A special designed calibration procedure will determine the power sensitivity of built-in RF detectors and eliminate unwanted parameters of components at each input. All calibration data is saved in the non-volatile microcontroller memory.

An 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-103** 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.

Please call or write to us today for any additional information

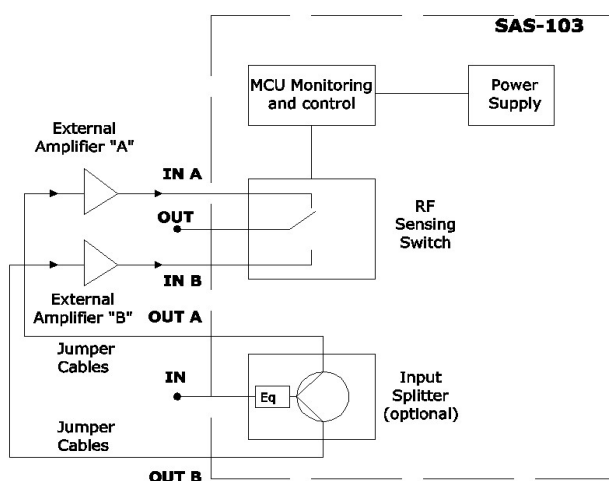


Switch Basic Configuration

**Technical Specifications****RF Sensing Switch:**

Parameter	Unit	Specification
Frequency Band	MHz	950 - 2150
Impedance	Ohm	75
Connectors Type		F-connector
Number of Inputs		2
Number of Outputs:		1
Insertion Loss, max	dB	2.0
Insertion Loss Flatness	dB	±0.5
Return Loss, all Ports, min	dB	14
Isolation, min	dB	40
Signal Input Level:	dBm	
min		-35
max		5
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	950 - 2150
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	18
Isolation between Outputs, min	dB	22

\*) Threshold Level sets up by customer

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compensates frequency slop of Splitter and RF Switch Insertion Loss.

Maximum insertion loss of RF Switch and Splitter connected together will not exceed 6 dB at 2150 MHz.

Built in  
Equaliz-  
com-

*CommDev manufactures products designed by engineers for engineers!*