

### **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-104** universal 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 only one half of a single 19" 1RU space which includes a self contained Power Supply, and a wide dynamic range RF sensing switch for flexible input signal conditions..

The unique mechanical structure of the unit allows for mounting within the original CommDev designed modular headend passive frame. A variety of modular frames are available ranging in height from 1RU to 5RU, as the unit will occupy 2 slots. This arrangement allows the unit to be suitable for multiple applications.

The RF Sensing Switch itself operates within the frequency range of 900-2150 MHz.

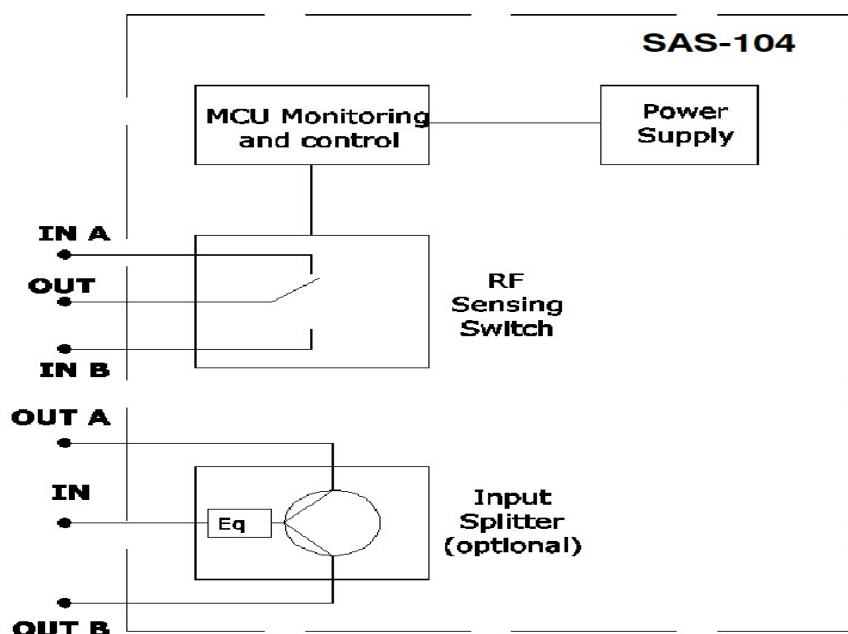
The completely new digital circuit design and its' monitoring circuitry will calculate the RF power at each input. A switching condition from primary input A to input B will occur if it is determined that the primary signal input falls below the signal level of input B and exceed the set threshold level. 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-104** 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

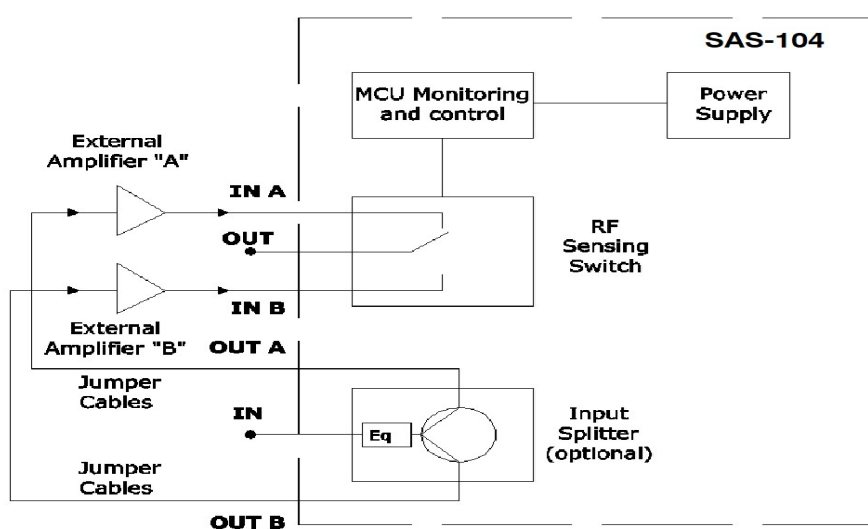


Switch Basic Configuration

**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

Built in Equalizer 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.

*CommDev manufactures products designed by engineers for engineers!*