

Features

- Electronic switching between two RF inputs for reliable output
- 5–250 MHz pass band
- Fast switching speed (<10 ms typical)
- Powered by DC voltage levels on RF inputs
- Supports multiple configurations of redundant RF receivers
- Extremely small form factor and requires no rack space
- Low insertion loss
- LED indicators for DC power presence and selected switch position

A/B Alternate Routing Switch (5-250 MHz)



The AB02S1S-0-00 Alternate Routing Switch is an external A/B switch designed to select an RF signal from one of its two inputs and deliver that signal to its output. With a 5-250 MHz pass band, the switch provides economic and reliable support for implementing optical return path redundancy between various portions of the network where indoor receivers are deployed.

Route selection is based on DC voltages from the analog receivers, and the switch position is determined by the presence or absence of voltages at the inputs of the switch.

The AB02S1S is designed to operate with all Aurora Networks products that have external A/B switch drive logic such as the AR3001 Analog Dual Return Receiver, DR3002 Dual Digital Receiver or DR3021 Dual Return Channel Digital Receiver.

AB02S1S

Product Specifications

Physical:

- Dimensions (without connectors):
2.9" L x 2.1" W x 1.0" H (7.4 cm x 5.3 cm x 2.5 cm)
L = 4.1" (10.4 cm) with connectors
- Weight:
0.3 lbs (0.1 kg)

Environmental:

- Operating temperature range: -20° to +65°C (-4° to 149°F)
- Storage temperature range: -40° to +85°C (-40° to 185°F)
- Humidity: 5% to 95% non-condensing

RF Interface:

- 2 RF inputs:
F-type (female connectors at A and B inputs)
- RF output:
F-type (female connector at front panel)

Power Requirements:

- Input voltage:
10 V_{DC} via A and B RF inputs
- Current consumption:
A position: < 20 mA
B position: 80 ± 20 mA

Electrical:

- Pass band: 5–250 MHz
- Frequency response: ±0.5 dB (excluding slope)
- Nominal slope, 250 / 5 MHz: 0.2 dB
- Insertion loss: 0.1 ±0.05 dB
- Insertion loss at 250 MHz: 0.3 dB maximum
- Return loss: 20 dB minimum
- Port isolation: > 75 dB
- Shielding effectiveness: 120 dB
- Switching time: <20 ms

Front Panel LED Indicators:

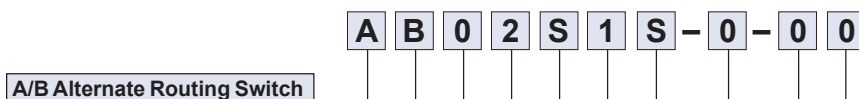
- STATUS A: Illuminated green when primary receiver OK
- STATUS B: Illuminated green when backup receiver OK
- A ON: Illuminated green when switch in A position
- B ON: Illuminated yellow when switch in B position

Switch Position Table and LED Indicator Status:

(for specified DC voltage levels on center pins of A and B inputs)

A Input	B Input	Active Switch Position	LED Indicator			
			STATUS A	STATUS B	A ON	B ON
10V	10V (A OK, B OK)	A	on	on	on	off
10V	0V (A OK, B fail)	A	on	off	on	off
0V	10V (A fail, B OK)	B	off	on	off	on
0V	0V (A fail, B fail)	A	off	off	off	off

Ordering Information



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