

# 1:2 quadSwitch

Dual-pole single throw quad RF switch helps build multi-purpose wireless testbeds with no need for manually moving RF cables for different tests.

The 1:2 quadSwitch quad single pole double throw (SPDT) RF switch module. Conveniently mountable to the side of the octoBox®, the 1:2 quadSwitch module is used for automatically reconfiguring the octoBox wireless personal testbed for a variety of test configurations. This module is completely isolated from the outside interference and optimized for use in octoBox personal testbeds.



1:2 quadSwitch; model: OB-2WAY-SW

## APPLICATIONS

- ✦ Wi-Fi (802.11a/b/g/p/n/ac/ax), Bluetooth and cellular (LTE, LTE-Advanced, including LAA and MulteFire)
- ✦ octoBox® personal testbeds automatic reconfiguration
- ✦ Test automation via REST API

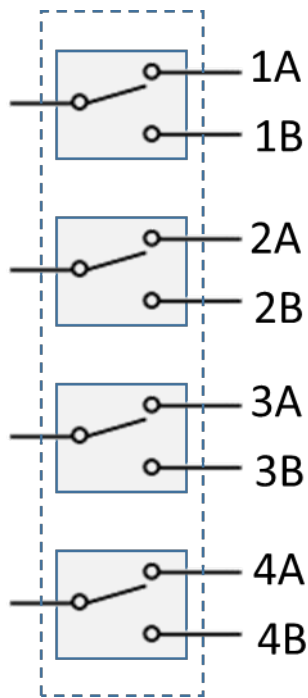
## SPECIFICATIONS

- ✦ Frequency range: 500 MHz to 6 GHz
- ✦ Connectors: SMA
- ✦ Insertion loss: 4 dB typ. At 6 GHz
- ✦ 1 dB compression: 30 dBm
- ✦ IP3: 55 dBm
- ✦ Completely isolated from outside interference
- ✦ Powered and controllable via PoE

The 1:2 quadSwitch is powered and controlled via its Ethernet PoE port and comes with a browser UI (see below) and REST API. You can find the API specifications at the following link:

<https://octoscope.atlassian.net/wiki/spaces/PUB/overview>

Each of the 4 SPDT switches are individually controllable via radio button selection in the browser or in a script via the API. The browser controls are shown below.



Click the common (green shaded) A button to switch all 4 switches to the A ports.

The screenshot shows the octoScope quadSwitch interface. At the top is the octoScope logo. Below it, the text reads "Welcome to the octoBox quadSwitch!". System information is displayed in two columns: Name: SW70721-07, Serial: SW70721-07, Firmware: 3.2.18-mh11 on the left; and IP Address: 169.254.21.7, Subnet: 255.255.0.0, Gateway: 0.0.0.0, MAC: 2C:27:9E:90:04:BF on the right. In the center, there are two rows of radio buttons. The first row contains buttons for A, 1A, 2A, 3A, and 4A. The second row contains buttons for B, 1B, 2B, 3B, and 4B. The 'A' and 'B' buttons are highlighted in green, and the 'A' button is selected. Below this is the "IP Settings:" section with input fields for IPv4 Address (169.254.21.7), Subnet Mask (255.255.0.0), and Default Gateway (0.0.0.0), along with an "Update" button.

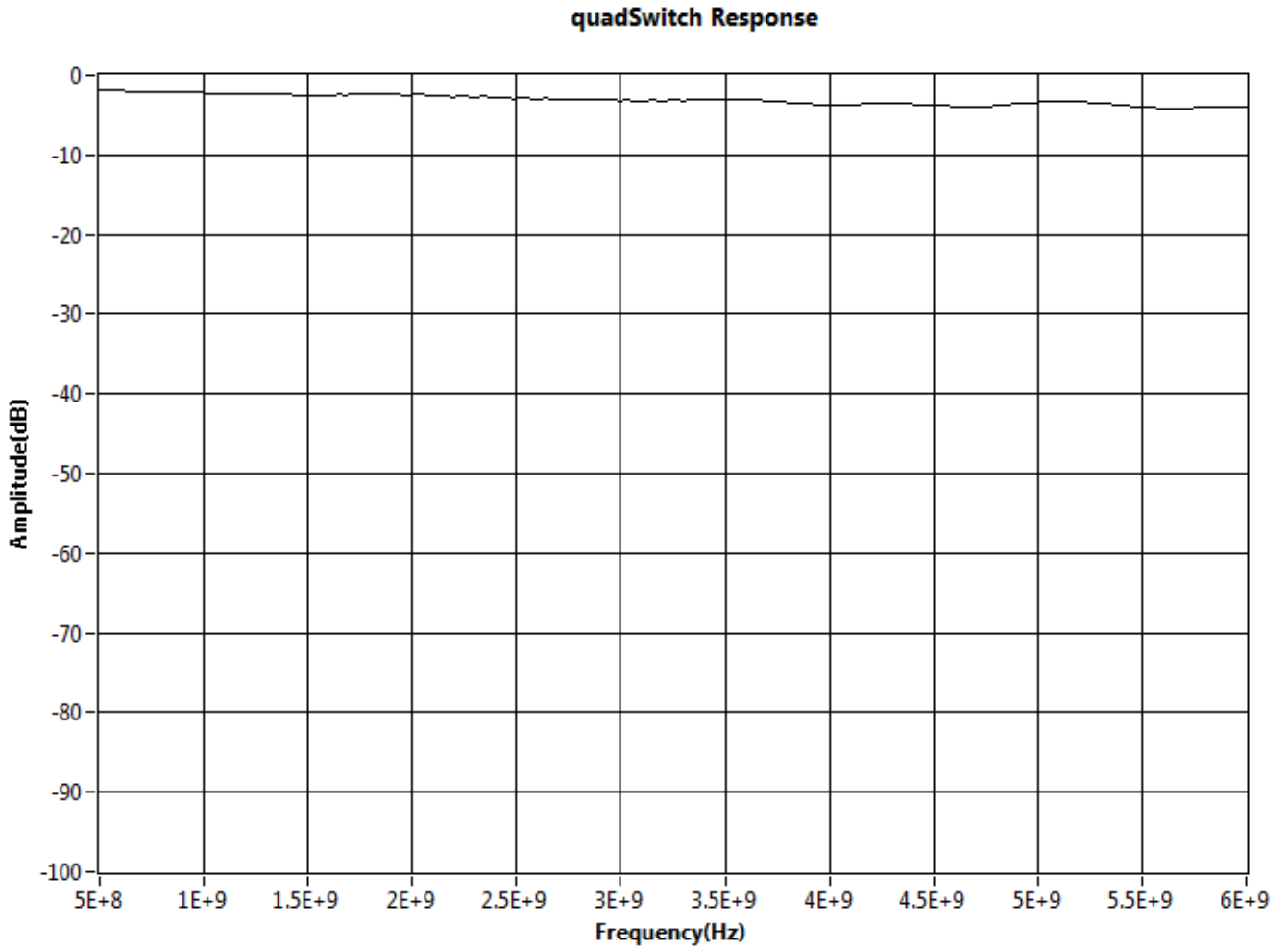
Click individual switch controls to set the corresponding switches to A or B ports.

This screenshot is identical to the one above, showing the octoScope quadSwitch interface. The system information and IP settings are the same. In the center, the radio buttons are arranged in two rows. The 'A' and 'B' buttons are highlighted in green. The 'A' button is selected, and the '1B' button is also selected, indicating that switch 1 is set to port B. The other buttons (2A, 3A, 4A, 2B, 3B, 4B) are not selected.

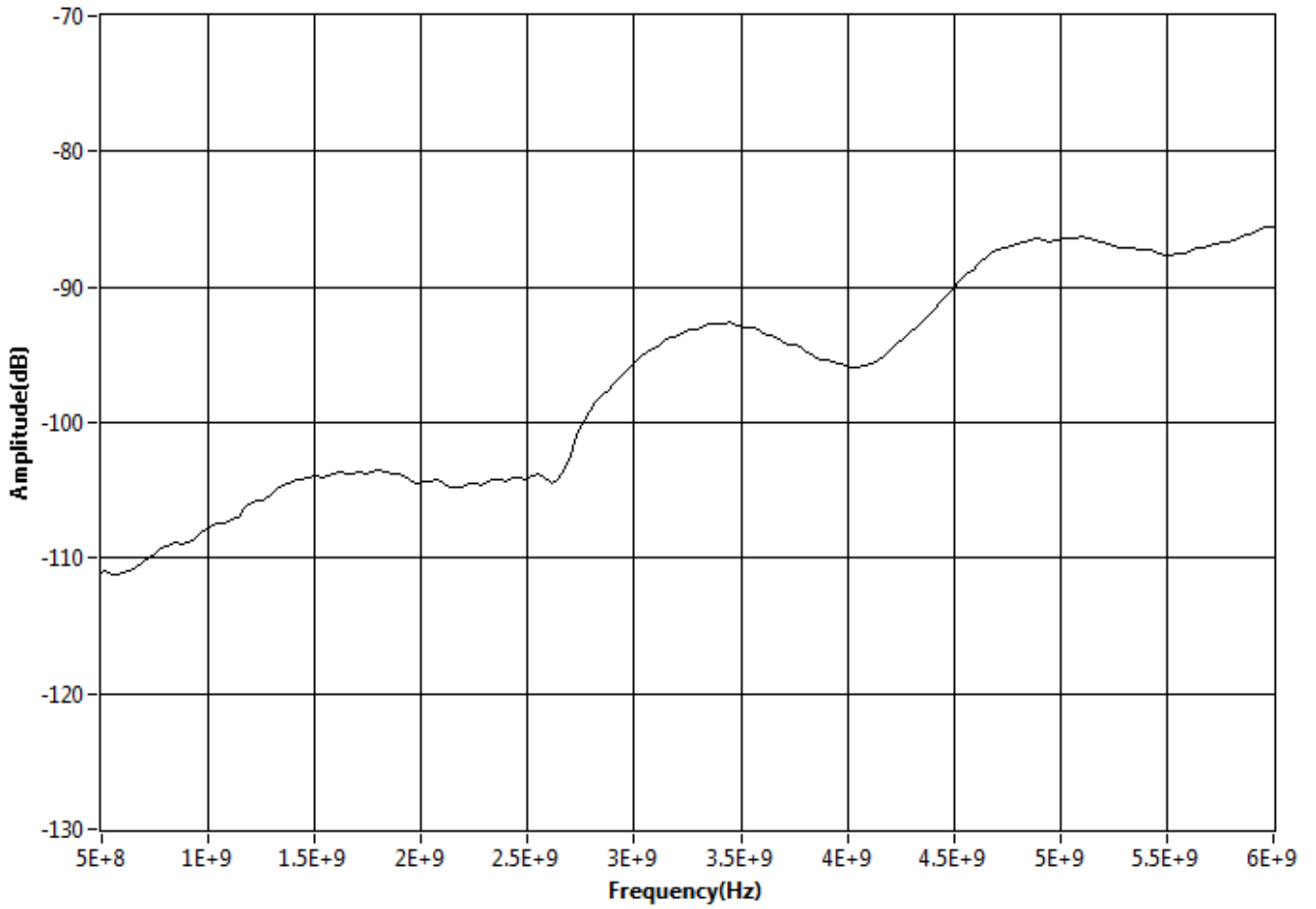
Click the common (green shaded) B button to switch all 4 switches to the B ports.

The screenshot shows the octoScope web interface for a quadSwitch. At the top, the octoScope logo is displayed. Below it, a welcome message reads "Welcome to the octoBox quadSwitch!". System information is provided in two columns: Name (SW70721-07), Serial (SW70721-07), and Firmware (3.2.18-mh11) on the left; IP Address (169.254.21.7), Subnet (255.255.0.0), Gateway (0.0.0.0), and MAC (2C:27:9E:90:04:BF) on the right. A port selection section contains two rows of radio buttons. The first row has buttons for A, 1A, 2A, 3A, and 4A. The second row has buttons for B, 1B, 2B, 3B, and 4B. The 'A' and 'B' buttons in the first column are highlighted with a green background, and the 'B' button in the second column is selected with a black dot. Below this is an "IP Settings" section with input fields for IPv4 Address (169.254.21.7), Subnet Mask (255.255.0.0), and Default Gateway (0.0.0.0). An "Update" button is located at the bottom right of the IP settings section.

**TYPICAL RESPONSE CURVES:** Representative performance plots of the quadSwitch insertion loss and isolation



### quadSwitch Response



## CONTACT

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