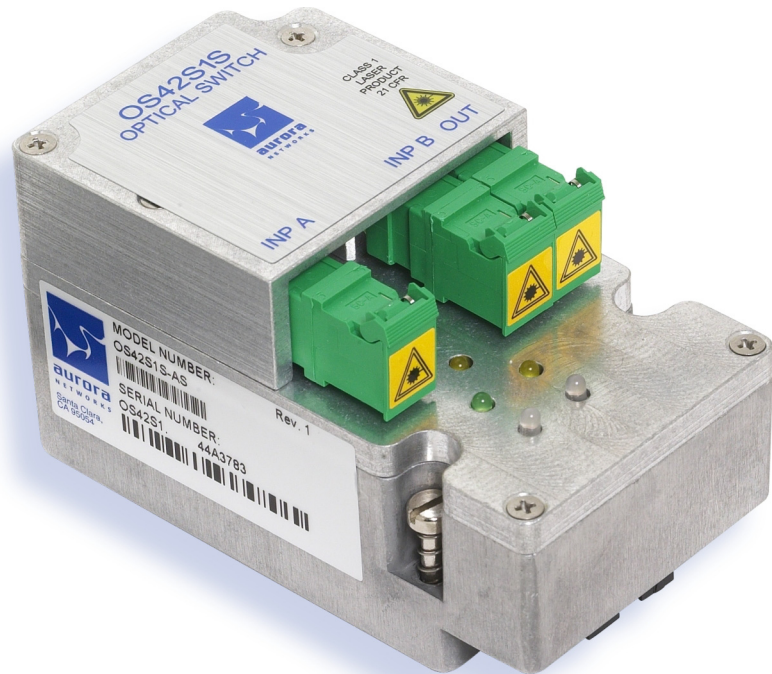


Features

- Non-latching 2x1 optical switch
- Fast switching speed (< 5 ms typical)
- User-settable switching thresholds for analog and digital transport applications
- Low insertion loss
- 1290 – 1620 nm operating wavelength window
- Remote status monitoring and control
- Hot plug in/out

Optical Switch



The Aurora OS42S1S is a robust, non-latching 2x1 optical switch that allows rapid and economic deployment of optical switching anywhere in the network without the expense of a facility or OTN cabinet. It allows signals to be fed over diverse routes, providing a highly reliable network infrastructure, and offers fast switching times and low insertion loss.

The OS42S1S switch has a guaranteed switching time of less than 10 milliseconds (and typically less than 5 milliseconds) and will only switch to the secondary fiber route when the primary route optical input power is below the threshold level and optical power on the alternate route is above the threshold level. The switch can operate either with factory-set default threshold levels or with user-settable thresholds for each input (or can be forced to operate with the input from either its A or B input). The wide dynamic threshold adjustment range supports any combination of both analog and digital transmission applications including telephony traffic.

The OS42S1S is capable of operating over a temperature range from -40 to +85°C and can be fully monitored and remotely controlled.

OS42S1S

Product Specifications

Physical:

- Dimensions: 4.0" L x 2.2" H x 2.3" W (10.2 cm x 5.6 cm x 5.8 cm)
- Weight: 0.6 lbs (0.3 kg)

Environmental:

- Operating temperature range: -40° to $+85^{\circ}\text{C}$ (-40° to 185°F)
- Storage temperature range: -40° to $+85^{\circ}\text{C}$ (-40° to 185°F)
- Humidity: 5% to 95% non-condensing

General:

- Hot plug in/out
- Switch configuration: 2x1
- Switch type: non-latching
- Switching speed: < 5 ms typical, 10 ms max
- Modes of operation: Fixed Threshold, Settable Threshold

Optical Interface:

- Optical connectors: SC/APC

Power Requirements:

- Input voltage: 24 V_{DC}
- Power consumption: 1.6 W

Optical:

- Wavelength range: 1290–1620 nm
- Input power: 25 dBm max
- Insertion loss: 1.2 dB typical, 1.6 dB max
- Isolation: 70 dB typical, 60 dB min
- Return loss: 55 dB typical, 45 dB min
- Directivity of tap-photodiode: 25 dB min

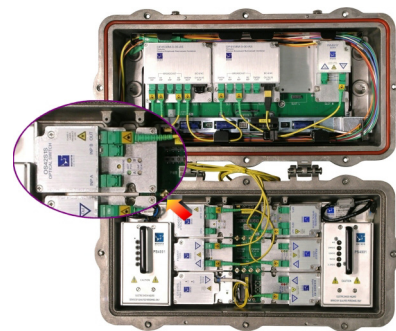
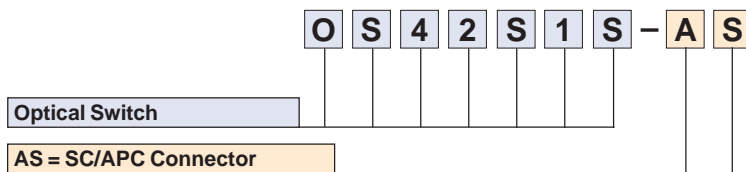
Status Indicator LEDs:

- INP STAT (input status indicators, two separate indicators for Inputs A and B); lighted green when OK, red for alarm condition, off when operating in OVERRIDE (forced) mode
- OUT POS (two switch position LED indicators), "A" LED lighted green when operating from Input A, "B" LED lighted yellow when operating from Input B
- OVERRIDE = Lighted yellow when switch forced to operate from Input A or B (user-settable)

Remote Monitoring / Control Parameters:

Optical input power levels A and B (operational range -24 to +24 dBm), switch status, operational mode, threshold levels (when operating in Settable Threshold mode, -20 to +20 dBm in 1 dB steps)

Ordering Information



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