

## HDO151 FIBRE OPTIC SWITCH

HDO151 is a fibre optic switch module for HDO product family. HDO151 unit has been designed for fibre optic routing as well as for back up switching. HDO151 can be operated both in 1310 nm and 1550 nm windows.

The unit has two inputs with optical power detectors and one output. The optical power detectors are used for making a switching decision. The unit works alone without any controller module.

A user can change the switching decision limits via UI.

### Features

- Very low power consumption
- High reliability
- Low insertion loss
- Deep optical power detection window
- Wide operating wavelength range
- Small form factor family, 2 RU height
- Local and remote software control of all adjustments

### Management features

- Switching decision optical power adjustment
- Signal routing monitoring
- Switching mode setting, automatic/ manual
- Switching restore setting, automatic/ manual
- Switching delay setting, high and low values
- Reference level setting with decision level setting
- LED indicators for signal and module statuses
- Internal temperature measurement and monitoring
- Non-volatile logging of 32 latest events, including alarms, alarming values, settings changes and application starts.
- Uptime and total uptime counters
- All alarm limits fully user configurable
- Local PC connection through backplane HDO bus with DVX021 cable
- Remote IP connection through HDC100 controller module
- SNMP monitoring and configuration through HDC100 controller module



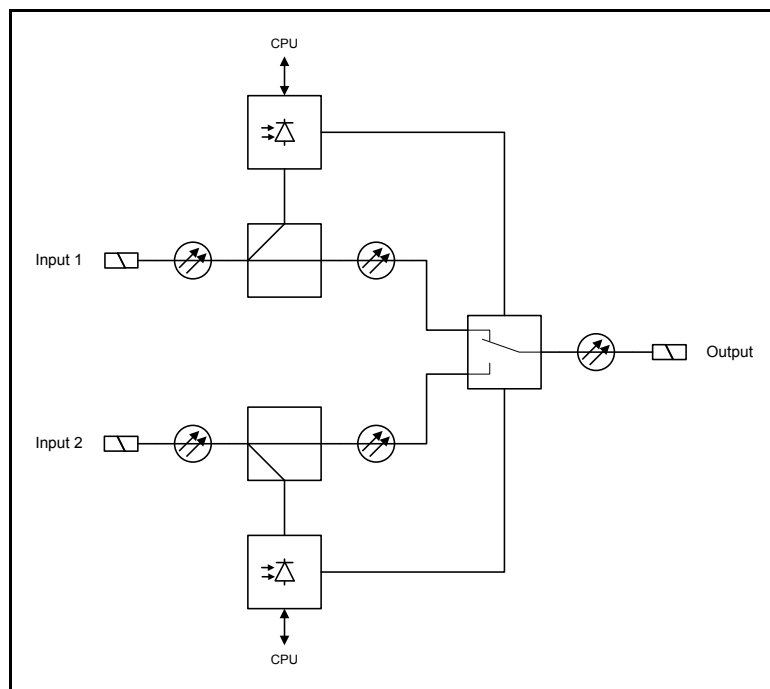
**Technical specifications**

Parameter	Specification	Note
<b>Optical parameters</b>		
Wavelength range	1260...1360 nm and 1460...1620 nm	
Insertion loss with connector loss	2 dB	
Cross talk	60 dB	
Return loss	50 dB	
Switching time	10 ms	
Optical power window for switching decision	-10...+20 dBm	1)
Maximum optical power	+30 dBm	
Number of optical ports	3	
<b>General</b>		
Power consumption	2 W	
Supply voltages	25 V / 50 mA 6.3 V / 60 mA	
Optical connector	SC/APC or E-2000/APC	
Dimensions	2U x 7HP x 380 mm Occupies 1/12 of HDX frame	h x w x d
Weight	1.5 kg	
EMC compliance	EN 50083-2	
Enclosure classification	IP20	
Operating temperature range	0...+45 °C	
Storage temperature range	-20...+60 °C	
Operating relative humidity	0...85 %	

**Notes**

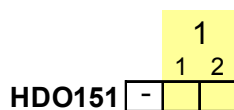
- 1) Total optical power in an input. A user can set the switching decision optical power within this window. The optical power measurement resolution is  $\pm 1$  dB in the window  $-5 \dots +20$  dBm and below  $-5$  dBm the tolerance is larger.

**Block diagram**



**Ordering information**

**HDO151 configuration map**



<b>1-1 Fibre adapter location</b>	
<b>F</b>	Front panel
<b>R</b>	Rear panel
<b>1-2 Fibre connector type and adapter type</b>	
<b>A</b>	SC/APC, 9 deg.
<b>C</b>	E-2000
<b>D</b>	SC/APC, 8 deg.
<b>H</b>	SC/APC with shutter, 8 deg.

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