OFS-4020

Optical Fibre Switcher

FEATURES

- **5 x 1 optical switcher.**
- **May be cascaded for expanded operation.**
- **Wideband operation 1260nm to 1620nm.**
- **Front panel local control.**
- **SNMP monitoring and control.**

GENERAL

The OFS-4020 optical fibre switcher allows 5 optical input signals to be switched to a single output.

OFS-4020 cards can be cascaded for expanded operation. Cards can be added sequentially with no user configurations needed.

Rather than having a receiver for each optical path and monitoring or switching the resultant electrical outputs, the OFS-4020 allows a single common optical receiver to monitor multiple optical signals.

When used at the signal transmit end, for example, and used in conjunction with optical splitters, the OFS-4020 ensures that each optical transmitter card is not only transmitting correctly, but is also being fed with the correct signal source.

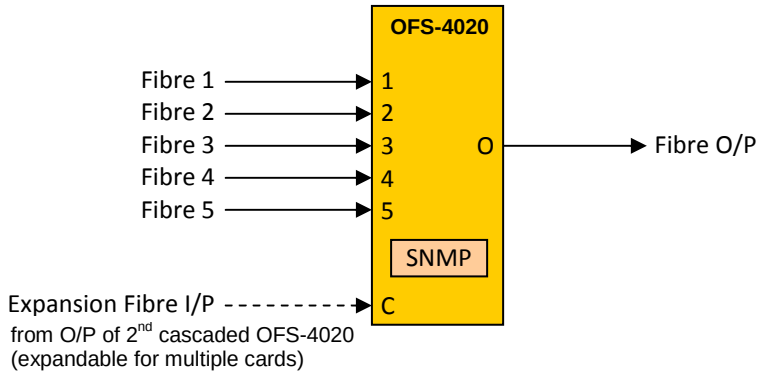
Likewise, using the OFS-4020 at the receive side allows monitoring of multiple signals coming out of the fibres before being fed into the receive end system.

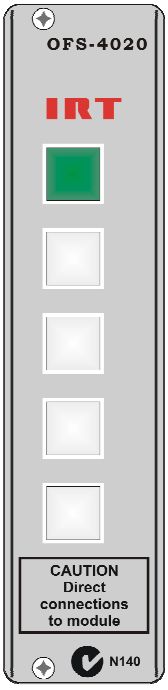
Local control is provided by front panel pushbutton switches that select and illuminate to indicate the switcher position status.

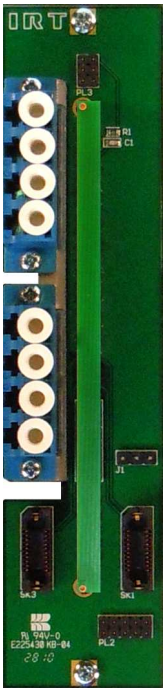
Simple Network Management Protocol (SNMP) monitoring and control is possible when operated in a frame fitted with SNMP capability.

The OFS-4020 is designed to fit IRT's 1000 series 1RU or 4000 series 3RU Eurocard frames.

BLOCK DIAGRAM OFS-4020 SIGNAL PATH







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TECHNICAL SPECIFICATIONS

Signal inputs:

Number	5 (+ 1 Carry In).
Type	Fibre, 9/125µm single mode.
Connector type	LC/PC (standard).

Signal outputs:

Number	1.
Type	Fibre, 9/125µm single mode.
Connector type	LC/PC (standard).

Optical Performance:

Wavelength	1260 – 1620nm.
Insertion loss	< 2.0 dB max. (typically 1.3 dB)
Return loss	> 50 dB.
Polarization dispersion	< 0.16 dB.
Cross talk	> 50 dB.
Switch time	< 8 ms.

Control inputs/outputs:

Type	Front panel; or SNMP.
Data Bus	1 input & 1 output.

Power Requirements:

Voltage	28 Vac CT (14-0-14) or ± 16 Vdc.
Power consumption	< 2VA.

Connectors:

Optical	LC/PC.
Control	Samtec ERF8 edge rate socket strip. (Mates with Samtec ERCD connector).

Other:

Temperature range		0 - 50° C ambient.
Mechanical		Suitable for mounting in IRT 19" rack chassis with input, output and power connections on the rear panel.
Finish:	**Front panel**	Grey background, black lettering & red IRT logo.
	Rear assembly	Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
Dimensions		6 HP x 3 U x 220 mm IRT Eurocard.
Supplied accessories		LC/PC to LC/PC 300mm optical patch lead for cascading of cards. ERCD cable for cascading of control bus when cascading cards.
Optional accessories		D9 to ERCD cable for RS-232 control interface.