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IRT Eurocard

Type OFX-4048

8-Way Fibre Optic Splitter

Designed and manufactured in Australia

IRT can be found on the Internet at:
<http://www.irtelectronics.com>

**IRT Eurocard
Type OFX-4048
8-Way Fibre Optic Splitter**

Revision History

Revision	Date	By	Change Description	Applicable to:
0	20/01/2010	AL	Original Issue.	Serial Numbers ≥ 0912001
1	29/06/2010	AL	Corrected block diagram.	Serial Numbers ≥ 0912001

**IRT Eurocard
Type OFX-4048
Fibre Optic Splitter**

Instruction Book

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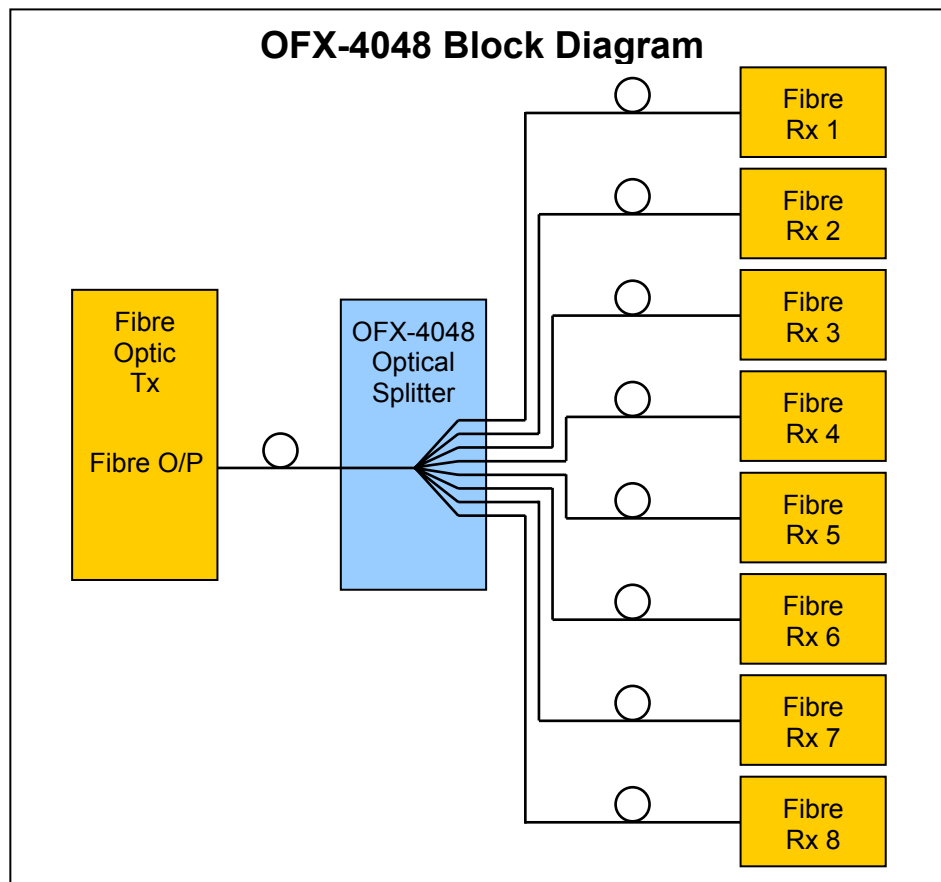
This instruction book applies to units later than S/N 0912001.

Optical Safety

The light emitted from the LASER diode used in this system is invisible and may be harmful to the human eye. Avoid looking directly into the fibre optic cable or connectors or into the collimated beam along their axis when the device is in operation.

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8-Way Fibre Optic Splitter

General Description



The OFX-4048 is an optical splitter suitable for use with IRT's complete range of optical fibre transmitters comprising of HD, SD, ASI, L-Band or analogue signals.

The input optical signal is split equally between outputs allowing eight optical receivers to be fed by the one optical transmitter. This allows either eight separate locations to receive the input signal optically via the one source, or allows optical fibre redundancy by sending via different paths.

The OFX-4048 is a passive unit that requires no power to operate and is designed to mount in IRT's standard 1RU and 4000 series 3RU frames.

Standard features:

- 8-way equal optical splitter.
- Operates in the full CWDM wavelength range.
- Suitable for all signal types.
- No power – totally passive.
- Connections made by SC/PC connectors.

Technical Specifications

IRT Eurocard module Type OFX-4048

Type	8-way equal optical splitter.
Wavelengths	CWDM range – 1300nm to 1620nm.
Fibre	Single mode.
Connector type	SC/PC.
Insertion loss	< 10.5 dB.

Other

Temperature range	0 - 50° C ambient.
Mechanical	Suitable for mounting in IRT 19" 1RU or 4000 series 3RU rack chassis with input and output connections on the rear panel.
Finish	Front panel Grey background, black lettering & red IRT logo.
	Rear assembly Common connection mounted on bracket from main PCB.
Dimensions	6 HP x 3 U x 220 mm IRT Eurocard.

Due to our policy of continuing development, these specifications are subject to change without notice.

Installation

Installation in frame or chassis:

See details in separate manual for selected frame type.

Signal Connections:

The OFX-4048 comes standard with SC/PC connectors.

Connect a fibre transmitter to the OFX-4048 input port via an optical patch lead with the correct optical connectors to match both the OFX-4048 and fibre transmitter.

To each of the eight output ports connect one end of the eight optical fibres, either directly or via optical patch leads. At the far end of the fibres connect the corresponding fibre receivers to match that of the fibre transmitter.

All IRT fibre transmitter/receiver pairs can be used with the OFX-4048.

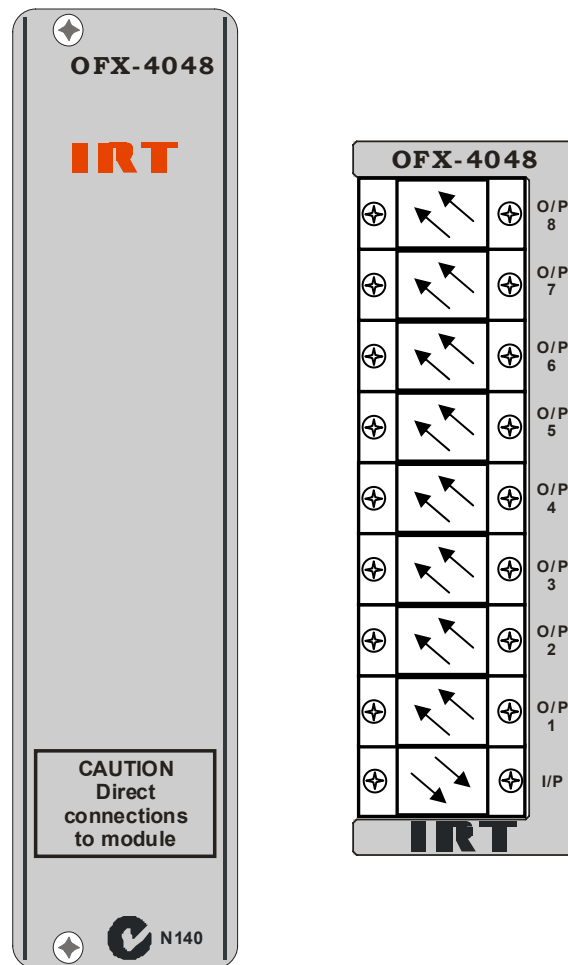
When calculating the maximum fibre length that can be run with the chosen fibre transmitter/receiver pair, remember to subtract the OFX-4048 insertion loss (10.5dB) to the maximum allowed optical fibre loss.

Depending on where the eight fibres have been run, optical receivers can be located at eight separate locations, or at the same location where fibres may have been run by independent paths for optical fibre redundancy.

Note that it is not necessary to terminate unused outputs. Number of outputs used can be anything from one to eight.

Front & rear panel connector diagrams

The following front panel and rear assembly drawings are not to scale and are intended to show connection order and approximate layout only.



Maintenance & Storage

Maintenance:

No regular maintenance is required.

Care however should be taken to ensure that all connectors are kept clean and free from contamination of any kind. This is especially important in fibre optic equipment where cleanliness of optical connections is critical to performance.

Storage:

If the equipment is not to be used for an extended period, it is recommended the whole unit be placed in a sealed plastic bag to prevent dust contamination. In areas of high humidity a suitably sized bag of silica gel should be included to deter corrosion.

Where individual circuit cards are stored, they should be placed in antistatic bags. Proper antistatic procedures should be followed when inserting or removing cards from these bags.

Warranty & Service

Equipment is covered by a limited warranty period of three years from date of first delivery unless contrary conditions apply under a particular contract of supply. For situations when “No **Fault Found**” for repairs, a minimum charge of 1 hour’s labour, at IRT’s current labour charge rate, will apply, whether the equipment is within the warranty period or not.

Equipment warranty is limited to faults attributable to defects in original design or manufacture. Warranty on components shall be extended by IRT only to the extent obtainable from the component supplier.

Equipment return:

Before arranging service, ensure that the fault is in the unit to be serviced and not in associated equipment. If possible, confirm this by substitution.

Before returning equipment contact should be made with IRT or your local agent to determine whether the equipment can be serviced in the field or should be returned for repair.

The equipment should be properly packed for return observing antistatic procedures.

The following information should accompany the unit to be returned:

1. A fault report should be included indicating the nature of the fault
2. The operating conditions under which the fault initially occurred.
3. Any additional information, which may be of assistance in fault location and remedy.
4. A contact name and telephone and fax numbers.
5. Details of payment method for items not covered by warranty.
6. Full return address.
7. For situations when “No **Fault Found**” for repairs, a minimum charge of 1 hour’s labour will apply, whether the equipment is within the warranty period or not. Contact IRT for current hourly rate.

Please note that all freight charges are the responsibility of the customer.

The equipment should be returned **to the agent who originally supplied the equipment** or, where this is not possible, to IRT direct as follows.

Equipment Service
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