



AUSTRALIAN RAIL TRACK CORPORATION

Certificate No.: **S-07-10-094**

## NEW EQUIPMENT & SYSTEM APPROVAL CERTIFICATE

**Approval date:** 13 September 2010

**Approved by:** ARTC Risk & Safety Committee

**Report no.:** TAS 07-1006-OP103

**Report date:** 5 July 2010

This certificate is issued to:

**Supplier:** Optical Systems Design Pty Ltd  
7/1 Vuko Pl  
Warriewood  
NSW 2102

In respect of:

**Manufacturer:** Optical Systems Design Pty Ltd

**Product description:** **OSD1250 RS232/422/485 REDUNDANT RING OR BUS MODEM**

**Item identification:** OSD1250 (850nm multimode)  
OSD1250L (1310nm multimode or single mode)

**Application:** Modem for use with Microlok II interlocking

**Relevant Standards:** SPS 02 Environmental Conditions  
SPS 05 Electrical and Electronic Components  
SCP 23 Design of Microlok II Interlockings

- Conditions of Approval:**
1. The modem has been assessed for use with the Microlok II interlocking.
  2. Where the modem is to be used as part of any other vital communications design, the safety critical aspects of the data transmission shall be managed by the vital communication devices and not the modems themselves.
  3. Although the OSD1250 can operate from a supply of 9 to 30VDC it is recommended a 12VDC supply is used to allow for any fluctuation in voltages.
  4. To achieve the benefits of improved availability of the communications system, where possible, the modems should be powered from the same supply as the devices they are connected to.
  5. When used in a ring configuration, the design of the optical fibre paths shall ensure the risk of both paths being damaged through the same event is minimised. As a minimum the optical fibres shall be housed in separate conduits.

*A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011.*

*Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid certificate.*

**Issue date:** 16/11/2010

**Expiry date:** N/A

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**Issued by:**

John Furness  
ARTC Manager Standards

## NEW EQUIPMENT & SYSTEM APPROVAL - APPROVED ITEM LIST

**Reference no.:** TAS 07-1006-OP103  
**Date:** 13 September 2010  
**Product description:** **FIBRE OPTIC MODEM**  
**Certificate no.:** **S-07-10-094**

The following lists the individual items (by catalogue number) are approved for use on ARTC infrastructure under the above referenced New Equipment & System Approval Certificate number, subject to any conditions shown on that Certificate and the Conditions of Use shown against individual items.

<b>Catalogue /Part No.</b>	<b>Item Type</b>	<b>Description</b>	<b>Conditions of Use</b> <i>(including Version number if applicable)</i>
OSD1250	Modem	Fibre Optic Modem	