

# RCX LVDS/RS422

Remote camera extension adapter for AIA to fiberoptic



#### Features

Module adapts AIA (LVDS/RS422) data to a fiberoptic interface

Accepts images of any resolution; sends data to a fiberoptic interface to send to host via DMA

Can join with a second module to form a fiberoptic extension cord

Allows remote operation - camera can be located up to 10 km from host

Provides electrical isolation between camera and host

Supports data rates up to 125 MB/s

Can connect directly to an EDT FOX board

#### Description

The RCX LVDS/RS422 is a remote camera extension module that adapts AIA (LVDS or RS422) data from a digital camera to fiberoptic cable. The camera can be located up to 10 kilometers from the host computer.

The module has a 68-pin connector to support a wide range of AIA cameras.

A module pair can be used to create a long-range fiberoptic connection to an EDT or third-party framegrabber. Alternatively, an EDT direct-fromfiber (FOX) framegrabber can be used, eliminating the need for a module at the computer end.

Line or frame triggering is supported over camera control lines..

## **Applications**

Astronomy

Aerial mapping

Computer microscopy

Intelligent traffic systems

Manufacturing / inspection

Remote scientific monitoring

Medical and nuclear imaging

Image archiving

Machine vision

Multimedia

Security

Product Type	RCX LVDS/RS422 is a remote camera extension adapter for AIA to fiberoptic; typically it is used with a PCI or PMC DV FOX interface.	
Memory	FIFOs for up to several lines of data; no frame memory	
Data Rates	Fiber operates at 1.33 Gb/s, passing video data at up to 125 MB/s.	
AIA Compliance	Supports most AIA format (LVDS/RS422) cameras that provide line- and frame-valid signals and a continuous pixel clock.	
EU Compliance	CE RoHS WEEE	Contact EDT Contact EDT WEEE directive 2002/96/EC
Laser Safety	Class 1	
Noise	0 dB	
Transceivers	One (wavelength 850 nm or optional 1310 nm), v         Wavelength       Cable         850 nm       62-μ MMF         850 nm       50-μ MMF	with duplex LC  Range at 1.33 Gb/s 300 meters 500 meters
	1310 nm 9-μ SMF	10 kilometers
Triggering	Via CC lines	
Power	Less than 5 W at 24 V	
Cabling	Cabling is purchased separately; consult EDT for options.	
Physical	Weight Dimensions	10.1 oz. typical 4.5 x 2.7 x 1.0 in. (requires an additional 2.2 in. for a 90° bend for the LC)
Environmental	Temperature Humidity	Operating 10° to 40° C; extended -40° to 60° C Non-operating -40° to 60° C Operating 20% to 80%, non-condensing at 40° C Non-operating 95%, non-condensing at 40° C
System and Software	System requirements and EDT-provided softwar	e driver packages are discussed in the specifications for your framegrabber.

### Ordering Options

- Signal levels: **LVDS** or RS422

- Transceivers: **850** / 1310 nm

- Power adapter: **110** / 220 V

- Cabling: Camera-specific

- Environmental: Extended temperature

**Bold** is default. Ask about custom options.