VisionLink XF

Remote camera extender over fiber for Camera Link, extended full mode

Description

The VisionLink XF is a fiber extender for base through extended full (80-bit) mode Camera Link. The fiber provides electrical isolation and allows the camera to be tens to thousands of meters from the host computer, depending on transceivers and cabling.

Each extender supports data rates up to 850 MB/s, with a pixel clock of 20-85 MHz.

The extenders work in pairs. One unit connects to the camera and the other to an EDT or third-party frame grabber via Camera Link cables. Fiber-optic cable then connects the two units for a complete extension system.

Triggering / serial is provided via Camera Link, or externally via a Lemo power connector which can replace the standard Switchcraft power connector.

Features

- Extender adapts Camera Link modes (base through 80-bit) over fiber
- Supports base through 80-bit mode up to 85 MHz
- Joins with a second extender to form a fiber-optic extension system
- Enables remote operation (tens to thousands of meters from host computer)
- Provides electrical isolation of camera from host
- Supports triggering / serial via Camera Link or externally via optional Lemo

Applications

- Astronomy / biology / microscopy
- Aerial mapping / traffic systems
- Commercial film / multimedia
- Medical and nuclear imaging
- Manufacturing / inspection
- Machine vision / robotics
- Security / surveillance
- Scanning / archiving
- Remote sensing

Specifications

Memory	FIFOs for up to several lines of data; no frame memory		
Data Rates	Up to 850 MB/s (maximum Camera Link rate)		
Data Format (I/O)	Camera Link		
Camera Link Compliance	Version	2.0	
	Modes	Base through extended full (80-bit) mode	
	Pixel clock rate	20–85 MHz	
	Serial	9600 to 115,200 baud	
	Control	CC1–CC4	
	Connector	Two SDR26	
EU Compliance	CE	TBD	
	RoHS	TBD	
	WEEE	WEEE directive 2002/96/EC	
Laser Safety	Class 1 (for EDT-supplied transceivers)		
Noise	0 dB		
Transceiver	Each extender has one fiberoptic SFP+ (10 Gb/s) with duplex LC; standard wavelengths and cables include...		
	Wavelength	**Cable**	**Range at 10 Gb/s**
	850 nm	62.5-µ MMF (OM1)	33 meters
	850 nm	50-µ MMF (OM3)	300 meters
	1310 nm	9-µ SMF	Up to 10 kilometers
	For longer ranges (10 to 100+ kilometers): CWDM and bidirectional transceivers are available in various wavelengths; contact EDT.		
Triggering / Serial	Camera Link	CC1–CC4, SERTC, SERTFG	
	External triggering / auxiliary serial	Optional 7-pin Lemo ECG.0B.307.CLV; mate to FGG.0B.307.CLAD.56	
Power	Consumption	Less than 5 watts at 12 V DC	
	Supply	12 V DC	
	Connector (standard)	2-conductor Switchcraft 712RA; mate to Switchcraft 760K	
	Connector (optional)*	7-pin Lemo ECG.0B.307.CLV; mate to FGG.0B.307.CLAD.56	
Cabling	Required cabling is purchased separately; see below and consult EDT for options.		
	Camera Link cables	1 meter each	
	Fiberoptic cable	See Transceiver section above	
	Fiber connection polish	Standard physical contact (PC)	
Physical	Weight	6.6 oz.	
	Dimensions	3.00" W x 3.25" L x 1.25" H	
Environmental	**Component**	**Temperature (operating / non-operating)**	
	VisionLink XF (with no transceivers)	-40 to +60° C / -40 to +60° C	
	Transceiver, 850nm	0 to +70° C / -40 to +85° C	
	Transceiver, 1310nm	-5 to +75° C / -40 to +85° C	
System	Computer system requirements are framegrabber-dependent; for details, see the user's guide for your framegrabber.		

Ordering Options

Part number(s)	**Description**
053-15258 / 053-15329	1 extender, camera end: **Switchcraft** / Lemo
053-15332 / 053-15333	1 extender, frame grabber end: **Switchcraft** / Lemo
037-15280 / 037-15346	2 transceivers, SFP+: 850 / 1310 nm
016-15341 / 016-15340	Cables, Camera Link (1 meter): 4 SDR-to-SDR / 4 SDR-to-MDR (or 2 of each type)
Contact EDT	1 cable: fiber-optic

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

International Distributors

sky blue microsystems

Sky Blue Microsystems GmbH
Geisenhausenerstr. 18
81379 Munich, Germany
+49 89 780 2970, info@skyblue.de
www.skyblue.de

ZERIF TECHNOLOGIES LTD.
A SKY BLUE COMPANY, FOUNDED 1999

In Great Britain:
Zerif Technologies Ltd.
Winnington House, 2 Woodberry Grove
Finchley, London N12 0DR
+44 115 855 7883, info@zerif.co.uk
www.zerif.co.uk