

KEY FEATURES

- ❖ Fully supports two unsynchronized base Camera Link™ cameras/frame grabbers
- ❖ Provides 4Gb/s transport bandwidth - 24b/pixel and pixel clock rate up to 66MHz for each camera (85MHz optional)
- ❖ Zero loss and transparent transport – no changes required for camera and/or frame grabber
- ❖ Two LC duplex fiber interface
- ❖ 8 opto-isolated GPIO channels (4 inputs and 4 outputs) for external trigger and control
- ❖ Two full duplex RS232 for remote instrument control
- ❖ Single 5V~24V DC power supply
- ❖ Locking AC/DC power adapter
- ❖ Transmission distance depending on your choice of fiber:
 - Multi-mode fiber – up to 250m
 - Single-mode fiber – up to 50km

APPLICATIONS

- ❖ High precision security surveillance (e.g. border control, airport)
- ❖ Bar code reading and sorting (e.g. postal center, packaging)
- ❖ Vehicle license plate reading/recording (e.g. toll booth)
- ❖ Product inspection (e.g. automated production line)
- ❖ Port/Harbor cargo container management
- ❖ Railroad measurement/inspection
- ❖ Traffic surveillance/control
- ❖ Cameras placed in harsh environment (e.g. nuclear plant)
- ❖ Long haul image transmissions (e.g. bridge inspection)
- ❖ Other Machine Vision Applications

PHRONTIER™
TECHNOLOGIES

PHOX™ Camera Link Fiber Extender

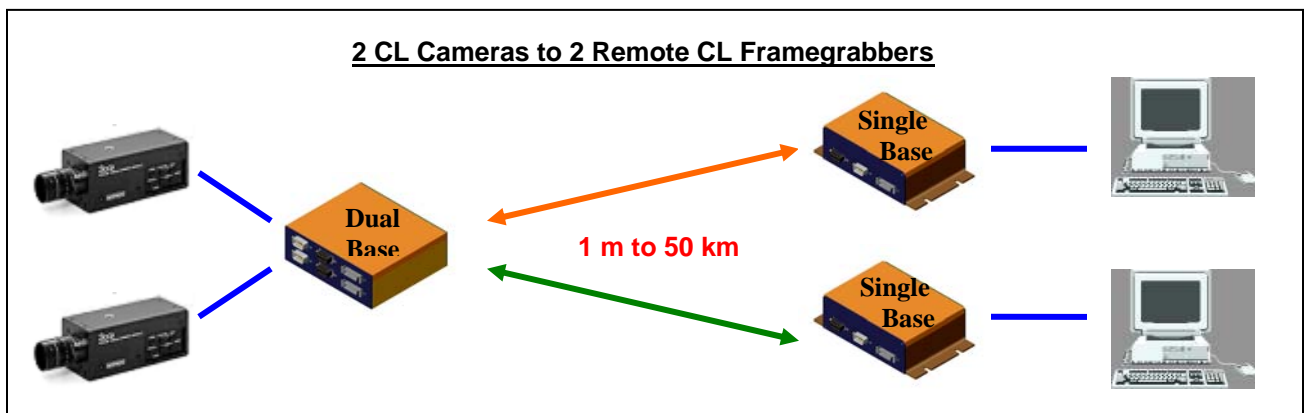
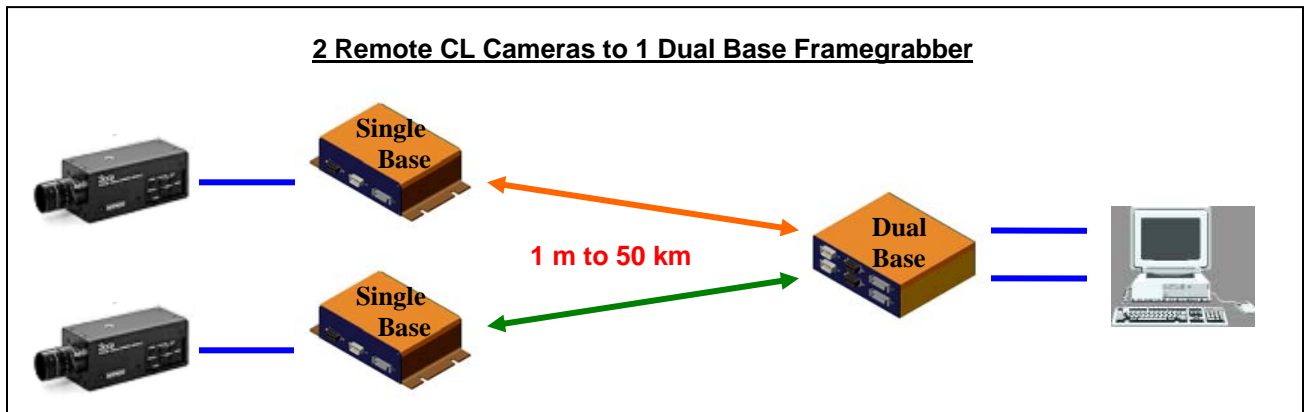
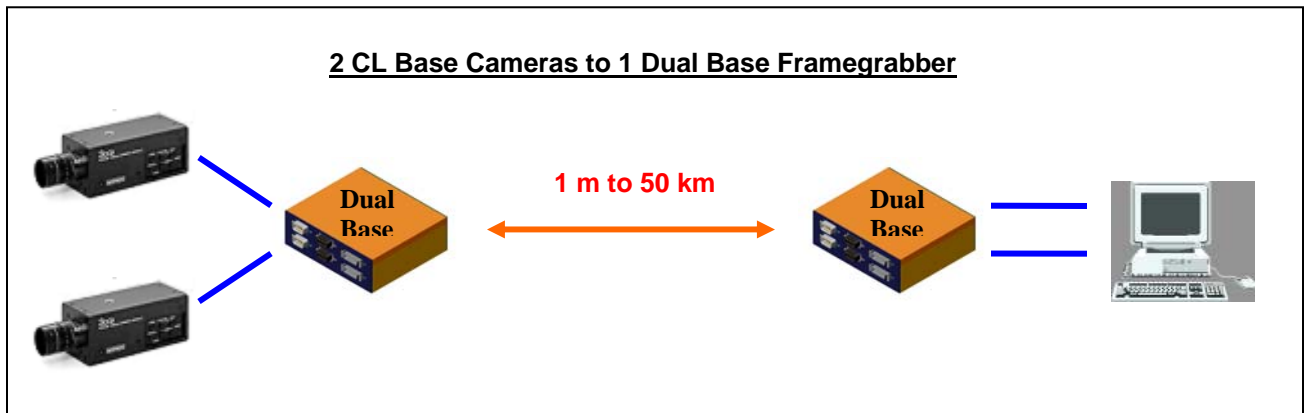
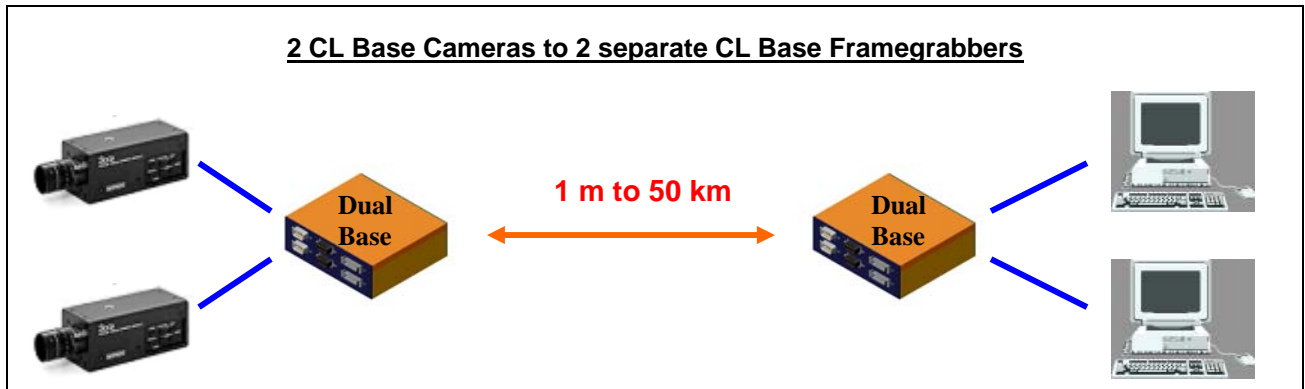
Dual Base Configuration

PHOX-B2M-250
PHOX-B2L-10/20/40/50



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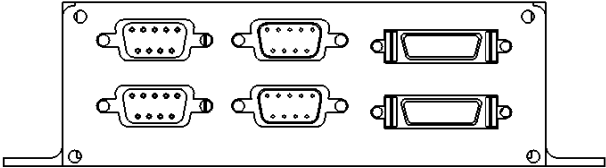
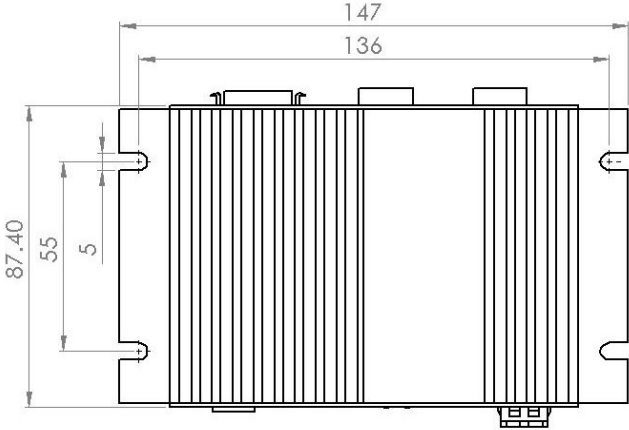
SYSTEM FLEXIBILITY



TECHNICAL SPECIFICATIONS

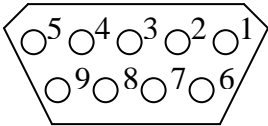
Camera Link Interface				
Max Pixel Clock	66 MHz			
Max Data Width per Pixel	24 bits			
Compatibility	Full Camera Link base mode			
Connector Type	MDR 26 pin			
Opto-isolated GPIO Interface				
Number of I/O Channels	4 input and 4 output (all are opto-isolated)			
Operating Voltage	0~3.3V (0~5.0V optional)			
Max. Data Rate	1 Mbps			
Connector Type	DB9 male			
RS232 Interface				
Number of Data Channels	8 (2 sets of Rx/D Tx/D RTS CTS)			
Operating Voltage	Input: +/- 25V, Output: +/- 6V			
Max Data Rate	250 Kbps			
Connector Type	DB9 female			
Optical Interface				
	Operating Wavelength	Optical Tx Output Power	Min Optical Rx Power	Fiber Type
PHOX-B2M-250	850 nm	-9.5 to -4 dBm	-17 dBm	62.5/125 μ m or 50/125 μ m multimode fiber
PHOX-B2L-10	1310 nm	-10 to -3 dBm	-18 dBm	9/125 μ m single mode fiber
PHOX-B2L-20	1310 nm	-5 to 0 dBm	-18 dBm	
PHOX-B2L-40	1550 nm	-5 to 0 dBm	-18 dBm	
PHOX-B2L-50	1550 nm	-2 to +3 dBm	-18 dBm	
Connector Type			LC duplex	
General Electrical Specification				
Input Voltage	DC 5 ~ 24 V			
Supply Current	600 mA each module			
Typical Power Consumption	7.2 W each module			
Operating Temperature	0 ~ 50 °C			
Connector Type	Switchcraft TA3F locking connector			
Approx Weight (each module)	370 gram			

MECHANICAL INFORMATION (mm)



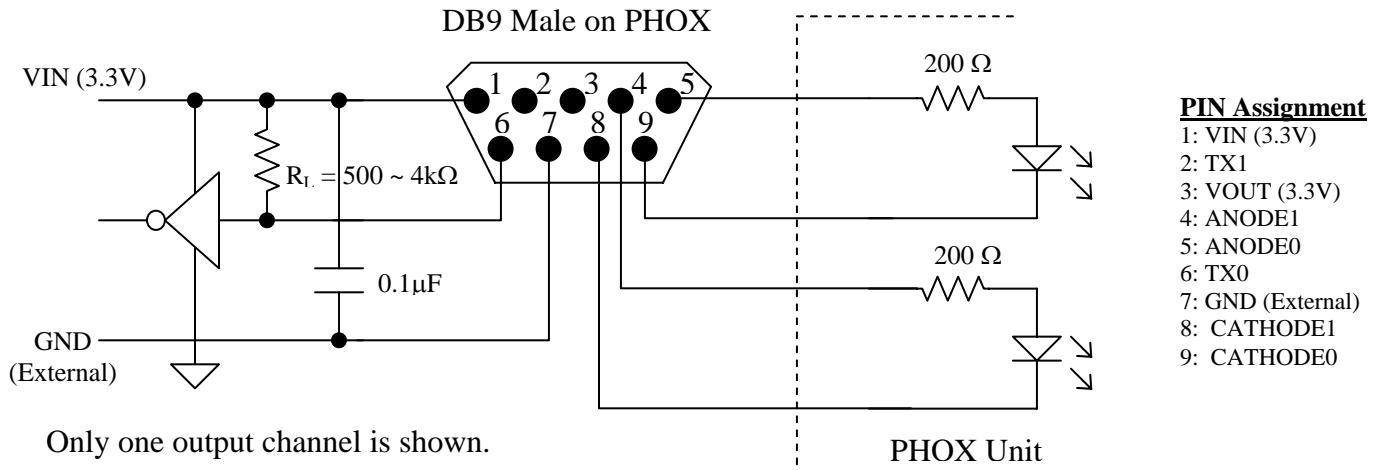
RS232 PIN ASSIGNMENT (FEMALE DB9)

DB9 Female on PHOX



- 1: N/C
- 2: Data Tx
- 3: Data Rx
- 4: N/C
- 5: GND
- 6: N/C
- 7: CTS (Clear To Send)
- 8: RTS (Request To Send)
- 9: N/C

GPIO PIN ASSIGNMENT (MALE DB9)



ORDERING INFORMATION

Model #	Transport Distance	Check List
PHOX-B2M-250	Up to 250 meters*	1x PHOX-CM 1x PHOX-FG 4x DB9 M/F RS232 cable (6ft) (upon request)
PHOX-B2L-xx	Up to 50 kilometers*	2x International AC/DC power adapters (12V DC output) with locking plug (LC duplex fiber cable not included)

- Note: xx = Maximum transporting distance in kilometers. Available in 10KM, 20KM, 40KM, and 50KM.
- * Distance depending on fiber type and system design. 250 m transmission distance for PHOX-B2M is based on 50/125 MM fiber. Extra optical losses in the system will reduce the maximum transmission distance.



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