ContrasTech

LEO Series Line Scan Cameras

GiGE VISION

LEO 2.5GigE Line Scan Cameras

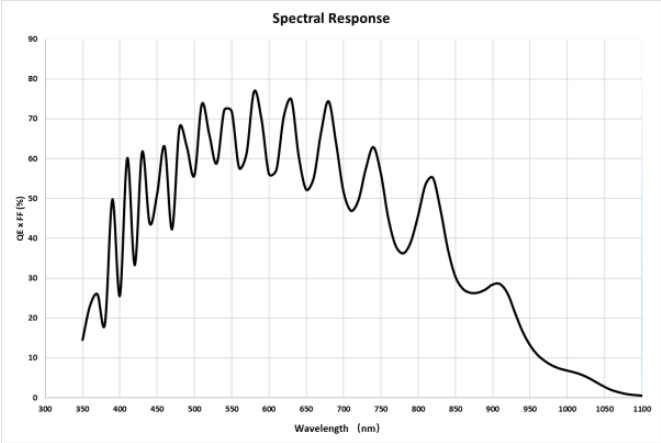
- 7μm, 4/8K CMOS Sensor optional
- 2.5GigE data interface optional
- Supports image modes of 1-Line, 2-TDI, and 4-TDI
- Rich ISP, support manual adjustment of Gamma correction,FFC, LUT, black level adjustment, etc.
- Compatible with GigE Vision and GenICam standard

Applied range • Defect Detection • Surface Patch Detection • Visual Positioning • Size Measuring • QR Code Reading • VR/AR • Logistics

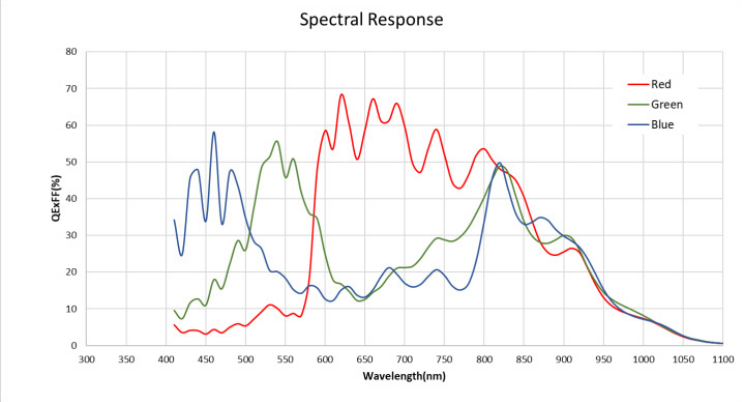
Camera	LEO 4KT4-75QTgm (Supports 2/4TDI)	LEO 4K-75QTgc	LEO 8KT4-37QTgm (Supports 2/4TDI)	LEO 8K-37QTgc
Resolution [H*V]	4096 × 4	4096 × 3	8192 × 4	8192 × 3
Spectral Response	A	B	C	D
Sensor Type	CMOS			
Pixel Size [μm]	7 × 7			
Line Frequency [KHz]	Mono 8: 75.3 kHz@1-Line/2-TDI、 40 kHz@4-TDI Mono10/12: 37.6 kHz@1-Line/2-TDI/4-TDI	75.3 kHz@Mono 8/Bayer RG 8、 25.1 kHz@RGB 8/BGR 8、 37.7 kHz@BayerRG 10	Mono 8: 37.6 kHz@1-Line/2-TDI、 34 kHz@4-TDI Mono10/12: 18.8 kHz@1-Line/2-TDI/4-TDI	37.6 kHz@Mono 8/Bayer RG 8、 12.5 kHz@RGB 8/BGR 8、 18.8 kHz@Mono10/12、 18.8 kHz@Bayer RG 10/12
Exposure Time	1μs~10ms			
Dynamic Range	60.9 dB	61.3 dB	63.9 dB	63.9 dB
Mono/Color	Mono	RGB real color	Mono	RGB real color
Image Format	Mono 8/10/12	Mono 8, Bayer RG 8/10, RGB 8,BGR 8	Mono 8/10/12	Mono 8/10/12, Bayer RG 8/10/12, RGB 8,BGR 8
Interface	2.5 GigE			
Synchronization	Via hardware trigger、software trigger or free run mode			
Housing Size	62 × 62 × 46.1 mm (260g)(a)		76 × 76 × 41.9mm (350g)(b)	
Operating Temperature	-30~80 ° C (Storage), -20~55° C (Working)			
Lenses Mount	M42*1.0, BFL 12 mm		M72*0.75, BFL 12 mm	
Digital I/O	Bi-directional configurable I/O x 4, supports differential and single-ended IO signals;			
Power Input	DC 12-24V, PoE		DC 12-24V	
Power Consumption	12V @7.3W	12V @7.2W	24V @6.7W	24V @8.6W
Driver	iDatum or 3rd party GigE Vision Software			
Operating System	Windows,Linux			
Conformity	GigE Vision , GenICam			

Spectral Response

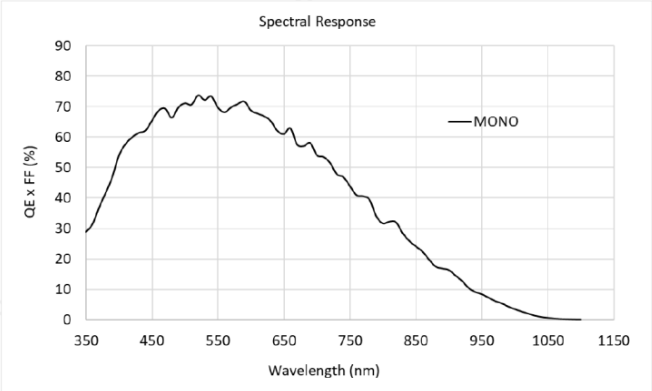
A



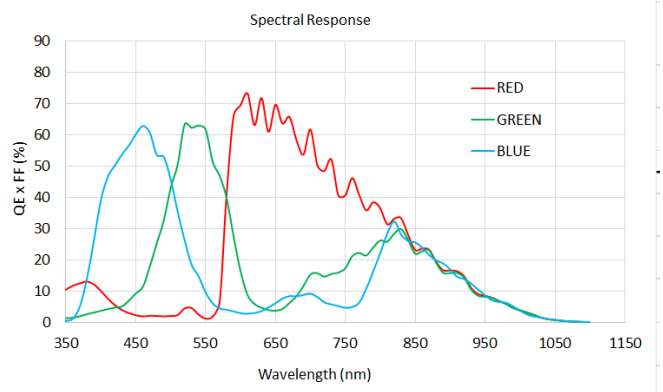
B



C

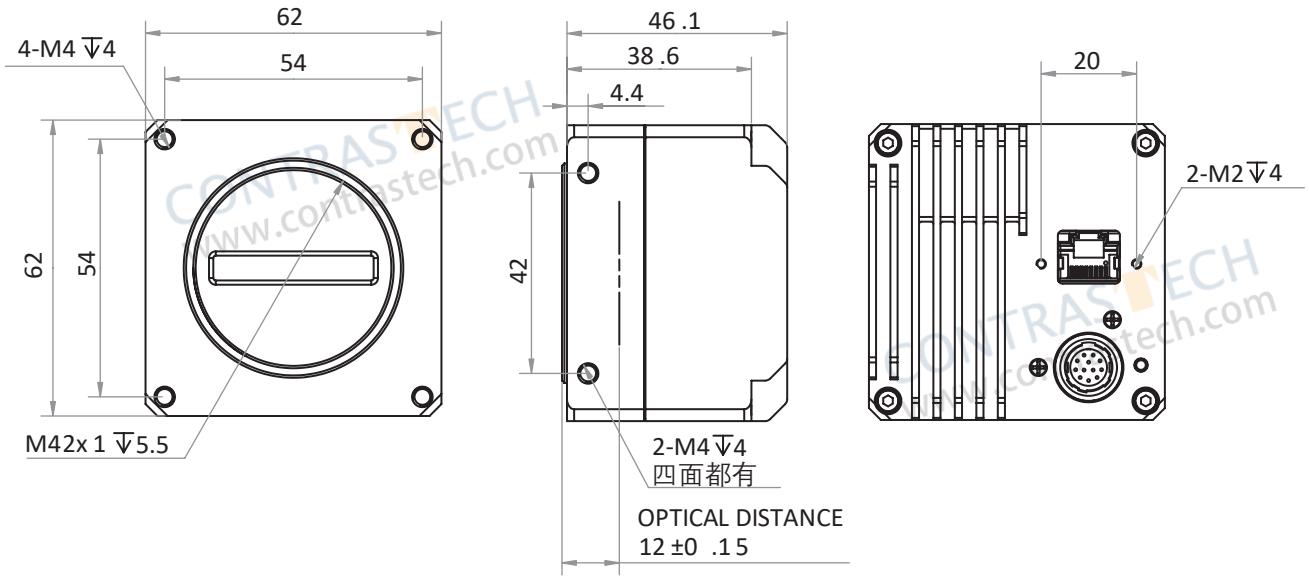


D



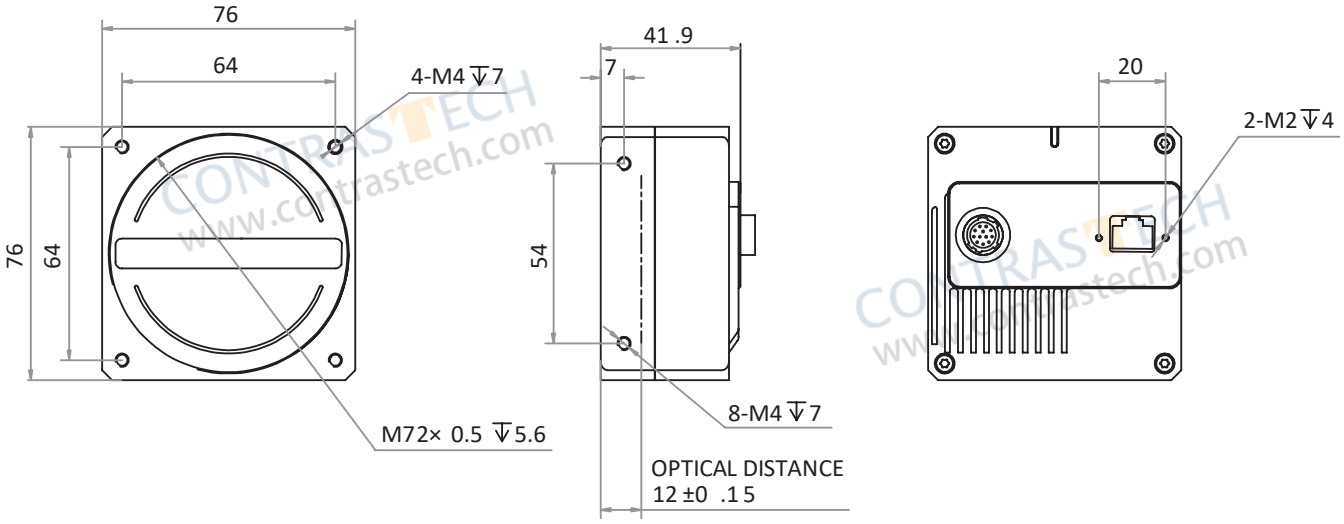
Dimensions

a

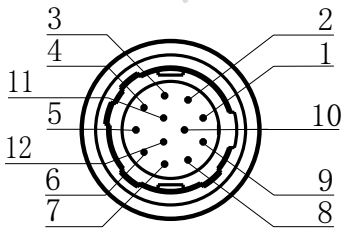


Dimensions

b



IO Interface Definitions



Pin	Signal	Signal Source	Designation
1	GND	-	Camera Power Supply Ground
2	DC-PWR	-	DC Camera Power
3	LINE0_P	Line0 +	Differential Input/Output IO 0+
4	LINE0_N	Line0 -	Differential Input/Output IO 0-
5	GND	-	Camera Power Supply Ground
6	LINE3_P	Line3 +	Differential Input/Output IO 3+
7	LINE3_N	Line3 -	Differential Input/Output IO 3-
8	LINE4_P	Line4 +	Differential Input/Output IO 4+
9	LINE1_P	Line1 +	Differential Input/Output IO 1+
10	LINE1_N	Line1 -	Differential Input/Output IO 1-
11	DC-PWR	-	DC Camera Power
12	LINE4_N	Line4 -	Differential Input/Output IO 4-

The I/O definitions in this manual apply only to ContrasTech standard cables for LEO cameras. Connect according to the I/O types and pinout. Using cables with different color codes from other manufacturers may cause incorrect connections and damage the camera. Always use ContrasTech standard cables.