

Blue Eagle digital camera DC3K-1-LVD

The Blue Eagle DC3K-1-LVD is a HDR-CMOS image sensor camera with LVDS data interface. The camera has a cubic housing layout with a pig tail including a HSD connector. Key feature is its very high thermal and mechanical stability. The camera is resistant against harsh environmental conditions like mechanical shocks, vibrations and hazardous atmospheres. Due to its IP67 housing the camera is also suitable for outdoor applications.



Features

- LVDS data interface
- 12 VDC power supply
- Low power consumption
- Wide range of fixed focus optics available
 - $\text{HFoV}_{\text{Min}} = 52^\circ$
 - $\text{HFoV}_{\text{Max}} = 192^\circ$
- Water tight optic with anti-scratch
- IP67 protection class
- Extended operating temperature
 - $T_{\text{Min}} = -40^\circ\text{C}$
 - $T_{\text{Max}} = +85^\circ\text{C}$

Applications

- Front view, rear view, area view and blind spot detection
 - Cars
 - Heavy trucks
 - Forklifts
 - Agriculture equipment
 - Mining machines

Certificates

- ISO/TS 16949

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Specifications

Parameter

Power supply	$V_{DCIN} = 12 \text{ VDC}$
Current consumption	120 mA @ 12 VDC and 30 fps
Operating temperature	-40 °C ... +85 °C

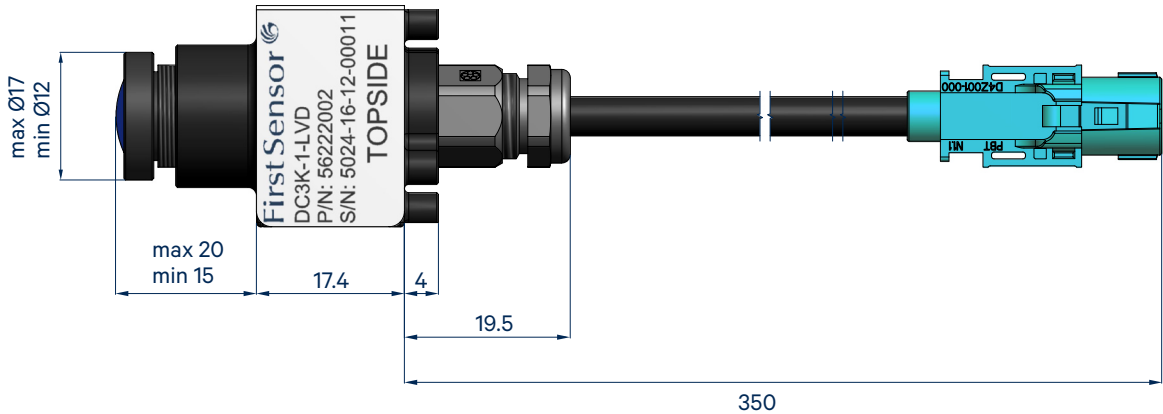
Technical data

Parameter

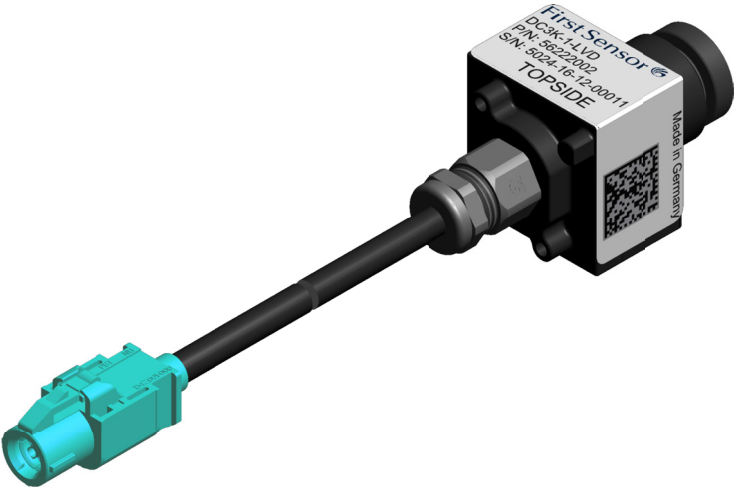
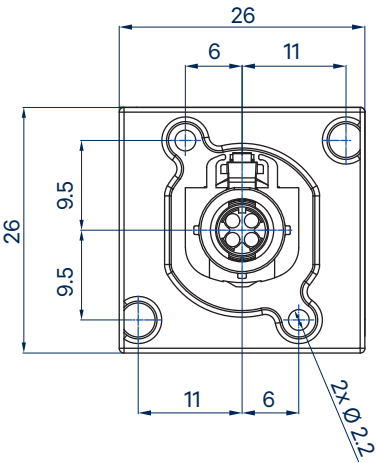
Parameter	Aptina imager [DC3K-1-LVD...A]	OmniVision imager [DC3K-1-LVD...O]
Sensor type	1/3 inch HDR-CMOS sensor AR0132AT including AP0100 1.2 Mp (1280 x 960)	1/2.7 inch HDR-CMOS sensor OV10635 1.0 Mp (1280 x 860)
Supported picture size	WXGA (1280 x 800)	WXGA (1280 x 800) HD 720p (1280 x 720) WVGA (768 x 480) VGA (640 x 480)
Sensitivity	Dynamic range: >100 dB (including optic)	
	Max. S/N ratio: 44 dB	Max. S/N ratio: 39 dB
Data interface	FPD-link III serializer DS90UB913Q 10-100 MHz 10/20-bit DC-balanced Bi-directional (I ² C-controller interface at 400 kHz)	
Format video stream	Pure transmission of raw signal	
General camera parameter	Automated gain control (AGC) High dynamic range (HDR) Automated white balance (AWB) Shutter: Electronic rolling shutter (ERS)	
Optics	52° ±2° horizontal field of view 105° ±2° horizontal field of view	112° ±2° horizontal field of view 192° ±2° horizontal field of view Anti-reflection coating (ARC), anti-scratch

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Physical dimensions



Bottom view - centralized cable entry



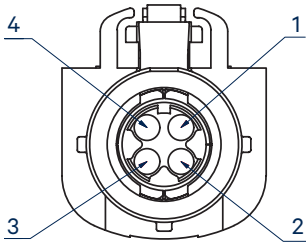
dimensions in mm

Cable: LEONI Dacar® 535-2, 4-pole (300 mm), 100 Ω impedance

Connector: RosenbergerHSD®, straight jack, D4K10A-1D5A5-Z

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Electrical connection



Pin	Connection
1	VDD
2	D+
3	GND
4	D-

Ordering information

Product code	Version	Interface	HFoV	Coating	Harness	Connector / imager			
DC3K-	1	Standard	LVD [LVDS-TI]	055	IRC [IR coating] ⁽¹⁾	CCA [cubic housing with cable]	HSU-A	HSD / AR0132AT	
	2	OEM		100			105° / 112°	HSU-O	HSD / OV10635
				190			192°		

Specification notes

(1) T >96 % for 400 ... 680 nm

Contact

First Sensor Mobility GmbH
 Königsbrücker Straße 96
 01099 Dresden
 Germany
 T +49 351 317762-0
 F +49 351 317762-12
 service@mobility.first-sensor.com