

Blue Eagle digital camera DC3K-1-2WE

The Blue Eagle DC3K-1-2WE is a HDR-CMOS image sensor camera with 2-wire-Ethernet (BroadR-Reach®) 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

- 2-wire-Ethernet, BroadR-Reach®
- 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 (PoE)	$V_{DC\ IN - NOM} = 12\ VDC$
Current consumption	115 mA @ 12 VDC
Operating temperature	-40 °C ... +85 °C

Technical data

Parameter	Aptina imager [DC3K-1-2WE...A]	OmniVision imager [DC3K-1-2WE...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	BroadR-Reach® BCM89810 MJPEG Scalable data rate (15 ... 70 MBit/sec) Compression factor: 500/(15 ... 70 MBit/sec) 30 fps	
Format video stream ⁽¹⁾	UDP (MJPEG-video compression) or 1722 AVB-Package ⁽²⁾	
Band width	~60 MBit per sec	
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

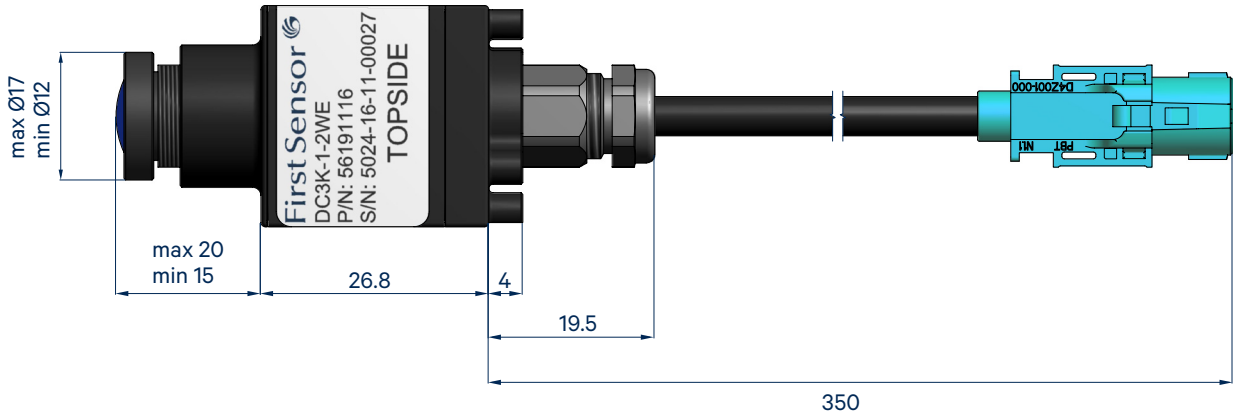
Specification notes

(1) Firmware allows to change format during use.

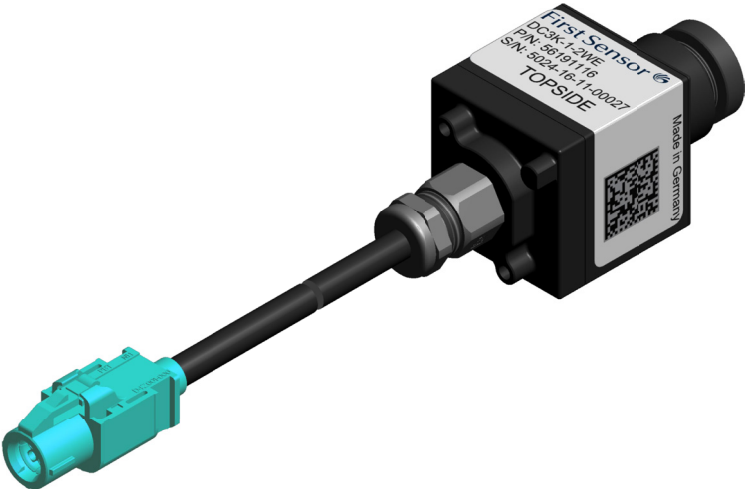
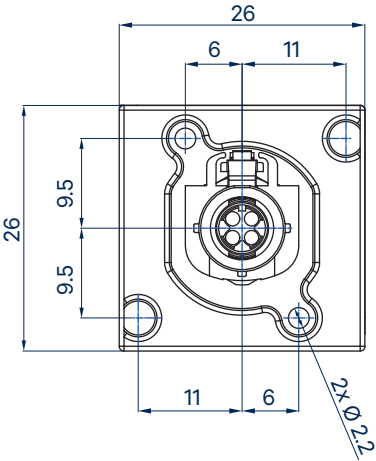
(2) IEEE 802.1Qat, IEEE 802.1AS, IEEE 802.1Qav and IEEE 802.1 BA are not included.

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Physical dimensions



Bottom view - centralized cable entry



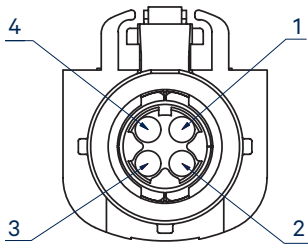
dimensions in mm

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	2WE [2-wire-Ethernet]	055	52°	IRC [IR coating] ⁽³⁾	CCA [cubic housing with cable]	HSU-A	HSD / AR0132AT
	2	OEM		100	105° / 112°			HSU-O	HSD / OV10635
				190	192°				

Specification notes

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

Contact

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