

BASLER RACER LINE SCAN CAMERAS

GigE & Cameralink Line Cameras

RAL6144-16GM
Racer GigE Camera, DR-6K-7 43mm CMOS, 6k, Mono

- 2 k to 12 k resolution and Up to 80 kHz Line Rate
- Supported by Pylon Suite software and open-source SDKs for easy image acquisition and fast application development
- Monochrome Cameras
- GigE Vision and Camera Link Interface Compatible
- Lens Mount: C-mount & F-mount



PRODUCT DESCRIPTION

Basler's Racer series of line scan cameras are compact, high-performance imaging solutions tailored for continuous material inspection in industrial environments. With resolutions ranging from 2k to 12k and line rates up to 80 kHz via Camera Link and 51 kHz via GigE, these cameras offer flexibility to meet various application needs. Their slim form factor (56 mm width) and lightweight design (approximately 240 g) make them ideal for integration into multi-camera systems and space-constrained setups. Equipped with global shutter CMOS sensors, they deliver high-quality, low-noise images, even under low-light conditions, thanks to their efficient heat dissipation and low power consumption.

In practical applications, Basler Racer cameras excel in web inspection (e.g., film, paper, textiles), sorting and packaging (e.g., mail, food products), and transportation-related inspections (e.g., underfloor, rail, container). The integration of GigE Vision 2.0 standard enables synchronous operation and real-time triggering over Ethernet, reducing the need for additional hardware. Models with Power over Camera Link (PoCL) functionality simplify system design by combining power and data transmission into a single cable, lowering overall system costs. Basler's comprehensive pylon SDK and open-source drivers facilitate seamless integration and development, ensuring that Racer cameras are a versatile and cost-effective choice for high-speed, high-resolution line scan imaging tasks.

TECHNICAL DATA

Approvals	CE, EAC, FCC, GenICam, GigE Vision, RoHS, UL
Digital inputs	3
Digital outputs	2
Height	62 mm
Interface	GigE
IP class	IP30
Length	36 mm
Lens barrel	C-mount, F-mount, M42, M58
Line speed max	17 kHz
Mono/color	Mono
Operating temperature	0°C ... 50°C
Pixel size	7 x 7

Power consumption	4.5 W
Resolution	6k
Resolution max	6144 x 1 px
Sensor model	DR-6k-7
Sensor size	43 mm
Sensor supplier	Awaiba
Sensor Type	CMOS
Shutter type	Global
Weight	240 g
Width	56 mm

