

BASLER RACER 2S LINE SCAN CAMERAS

Small Form Factor Line Cameras

R2L4096-29GM
Basler Racer 2- GL3504 Sensor, GigE Interface, 4k
Resolution, 29kHz Line Rate, Mono



- 2 k & 4 k resolution and up to 172 kHz Line Rate
- Supported by Pylon software suite for easy image acquisition
- Colour & Monochrome cameras
- GigE, 5GigE and CXP-12 interfaces
- 29 x 29 mm form factor

PRODUCT DESCRIPTION

Basler's Racer 2S line scan cameras are high-performance imaging solutions designed for industrial environments requiring precise and high-speed inspection. Built with the CoaXPress 2.0 interface, these cameras deliver data rates of up to 12.5 Gbps per channel, ensuring fast image transmission even at high resolutions. The Racer 2S series features sensors with resolutions ranging from 2K to 16K and supports line rates up to 140 kHz. Equipped with CMOS sensor technology, these cameras offer excellent image quality, low noise levels, and high dynamic range—ideal for applications that demand fine detail and rapid throughput.

These cameras are particularly well-suited for practical applications such as web inspection in printing, textiles, and paper production, as well as semiconductor inspection and sorting processes in logistics and food industries. Their compact housing and standard lens mounts make integration straightforward, even in space-constrained setups. Thanks to the CoaXPress interface, users benefit from long cable lengths and reliable, high-speed data transfer, making Racer 2S cameras an excellent choice for scalable, high-performance line scan systems in modern industrial automation environments.

TECHNICAL DATA

Approvals	CE, EAC, FCC, GenICam, GigE Vision, RoHS, UL
Digital inputs	3
Digital outputs	2
Height	29 mm
IP class	IP30
Length	62.2 mm
Lens Barrel	C-Mount
Line speed max	29 kHz
Mono/color	Mono
Operating temperature	-10°C ... 60°C
Pixel size	3.5 x 3.5
Resolution	4k
Resolution max	4096 x 1 px

Sensor model	GL3504
Sensor size	14.34 mm
Sensor supplier	Gpixel
Sensor Type	CMOS
Shutter type	Global
Weight	100 g
Width	29 mm