



ADAS

Camera head for off-highway applications

Imaging sensor for assistance and automation



3MP off-highway camera head

With the off-highway camera head, Bosch offers a robust, high-quality, and state-of-the-art video sensor for various applications – from vision-based assistance to autonomous machines.

- Visual input sensor for assistance systems
- Sensor fusion for conditional and fully automated machines
- Adaptability: precise image definition via an external Image Signal Processor (ISP) for specific use cases
- Compatibility: ideal for image-based algorithms and image rendering (e.g., image processing, neural networks)
- Robust design: small, durable, and meets highest quality standards.
- Future-oriented: part of the Bosch modular system with successive variants
- Cost efficiency: excellent price-performance ratio
- Technical excellence: high frame rate, improved light sensitivity, advanced noise reduction, safety features

TECHNICAL CHARACTERISTICS

Resolution	3 MP
Field of View	190° horizontal / 150° vertical
Resolution	1920 x 1536
Frame rate	30 FPS
Pixel pitch	3 µm
Color Array	RGGB (no Image Signal Processor (ISP) in camera)
Output	FPD-Link III, raw data (12 to 24 Bit) GMSL2, raw data (12 to 24 Bit)

Connector	FAKRA Mini (HFM)
Housing	Aluminum with coated glass lens IP6K7
Dimensions	23 x 23 x 42 mm Ø 17 mm
Lens heating	Optional

AVAILABILITY

3MP sample	Available
Production model	Q3 2026

Support for sample commissioning and production integration



Bosch 3MP camera head

Integration support:

- Sample bracket
- Sample cables
- Frame grabber solution
- Parameter files
- ISP tuning



Customer ECU or Bosch robotics controller