D-Robotics

RDK X3 Camera Module RS800W
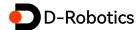
D-Robotics RDK X3 Camera Module RS800W

The RS800W dedicated HD camera module features a compact design and is equipped with a high-sensitivity sensor. It delivers high-speed and stable image transmission through the CSI interface, providing a professional-grade imaging solution for AI vision applications such as industrial inspection and robotic navigation.
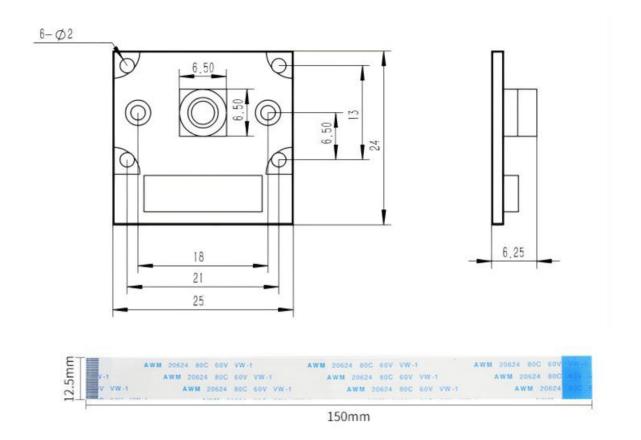
BRIEF

The RDK X3 RS800W camera module is equipped with the Sony IMX219 PQ CMOS sensor, offering 8-megapixel high-definition imaging and a 77° wide-angle lens with optical distortion below 1%. The module connects directly via a 24-pin MIPI CSI interface and supports automatic exposure and white balance. With an ultra-thin design and a 1/4-inch lens specification, it is an ideal choice for high-precision vision applications including mobile robots and intelligent surveillance.

SPECIFICATIONS

Image Sensor	Sony IMX219 PQ CMOS fixed-focus module
Resolution	8 megapixels, supports up to 3280×2464 at 30 FPS
Field of View (Diagonal)	77°
Focal Length	2.96 mm
Distortion Rate	<1%
Connection	24-pin flat cable direct connection
Image Control Features	Auto Exposure Control / Auto White Balance
Operating Temperature	-30℃ to 85℃ (Stable Imaging: 0℃ to 60℃)
Lens Size	1/4 inch
Dimensions	24 × 25 × 6 mm
Weight	3 grams
Lifecycle	Mass production maintained at least through 2030

Dimension

WARNINGS

- Do not plug or unplug the camera module while powered on to avoid damaging the connector.
- Ensure the power supply voltage meets the specification (5V ±5%).
- Do not use the module outside the operating temperature range (–30℃ to 85℃).
- Avoid using in environments with strong electromagnetic interference or high humidity.
- Do not apply mechanical impact to the lens or directly touch the optical elements.
- Prevent foreign objects from entering the connector terminals.

SAFETY INSTRUCTIONS

To Avoid Malfunction Or Damage:

- Installation and removal must be performed by qualified personnel.
- Ensure the 24-pin connector is aligned with the slot and inserted vertically.
- Regularly inspect the cable connection status.
- Use dedicated lint–free cloth and optical cleaner for lens cleaning.
- Store in anti–static packaging when not in use.

For detailed specifications, please visit : https://developer.d-robotics.cc/en

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