



lens for illustration purposes only

TOSHIBA

The Toshiba IK-HR2D is a lightweight 1/3" 1-CMOS High Definition (HD) compact camera having 1920 x 1080 output pixels (16:9 ratio) with DVI-I output.

This compact camera delivers true progressive scan real-time video from a DVI output. **It has the added ability to send video frames direct to your computer via USB removing the need for a frame-grabber.** This one piece camera provides sharp, high-definition imagery with the reliability and quality you can expect from a Toshiba camera.

Contact SeeSense for lens options for the Toshiba IK-HR2D camera.

Specifications:

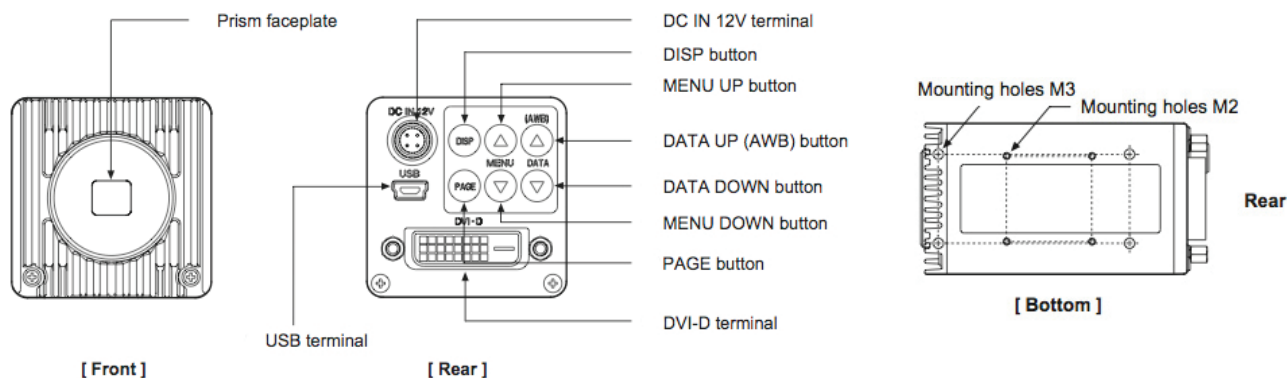
- Ultra compact (approx 44 x 44 x 78mm) one-piece system
- Outputs full 1920 x 1080 pixels at 50/60 fps
- Output selectable between 1080i, 1080p and 720p
- Utilises 1/3" CMOS 2.1 megapixel HD sensor
- On-screen menu
- Weight 150 g. (without lens),
- Digital DVI and USB outputs
- **USB 2.0 port outputs video clips and eliminates need for frame grabber**
- Auto and manual white balance
- Auto and manual electronic shutter
- C-mount - SeeSense CS-mount version available (IK-HR2Q)
- 2 years warranty

This camera has many suitable applications in the following industries:

Broadcast
Medical especially microscopy
Scientific imaging / diagnostics
Homeland security
Industrial including video / inspection

SeeSense are able to provide technical assistance and back up for this camera as well as offering additional special modifications such as CS mount, IR Sensitive, low light, etc.

Please contact SeeSense for details and advice.



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Specification Performance

| | |
|-----------------------|--|
| Power Requirements | 12 V DC \pm 10% DCIN connector (4pin) |
| Power Consumption | Approx. 4.1 watts |
| Image Sensor | 1/3" progressive scan CMOS |
| Output Pixels | Horizontal: 1920, Vertical: 1080 |
| Scanning System | Progressive (720p)/Interlaced (1080i) Switchable |
| Sync / Freq | DVI output Digital output (DVI-D connector) |
| | Progressive / Interlace |
| | 1080p/59.94Hz, H:67.43KHz, V:59.94Hz |
| | 1080p/50Hz, H:56.25kHz, V:50Hz |
| | 1080i/59.94Hz, H:33.72KHz, V:59.94Hz |
| Sync / Freq | 1080i/50Hz, H:28.13kHz, V:50Hz |
| | 720p/59.94Hz, H:44.96kHz, V:59.94Hz, |
| | 720p/50Hz, H:37.50kHz, V:50Hz |
| | USB output (UVC1.1 compliant YUV 4:2:2) |
| | Non-compressed |
| Sensitivity | 1920 x 1080 (approx. 5fps) |
| | 1280 x 720 (approx. 10fps) |
| Sensitivity | F/4 standard (2000 lux, 3000K) |
| Min. Illumination | 8 lux standard (50 IRE, f1.4, gain + 18 dB) |
| Frame Rate | DVI: 30 fps (1080i), 60 fps (1080p / 720p) |
| | USB : 5 fps (1080 mode), 10 fps (720 mode) |
| Video Signal Output | Digital output (DVI-I connector output) 8bit X RGB |
| Sync. System | Internal |
| Camera Lens Mount | C-mount 17.526mm (in Air) |
| Dimensions | 44 x 44 x 78mm |
| Weight | 150 grammes |
| Operating Temperature | 0°C to + 40°C |
| Storage Temperature | -20°C to + 60°C |
| Humidity | 90% or less (non-condensing) |

Specification Features

| | |
|--------------------|--|
| Shutter Modes | Manual – Off (1/60s / 1/50s), 1/100s, 1/250s, 1/500s, 1/1000s, 1/2000s, 1/4000s, 1/8000s, 1/16000s, 1/32000s |
| | Auto Level – range of -100 to 100 |
| | Synchronized Scan – Set by horizontal scanning time |
| Gain | MANUAL (manual), OFF (0dB) |
| White Balance | AWB (Automatic White Balance) |
| | ATW (Automatic Tracking White Balance) |
| | Manual (Manually Adjustable) |
| Gamma | OFF / MANUAL : 0 to 12dB (1dB/step) |
| Scene File Setting | 5 Files A/B/C/D/E |

Recommended Accessories

Lenses

The following lenses (a small selection only) have been tested by SeeSense and are known to be compatible with this camera. (angles of view quoted are in the horizontal plane).

| | | |
|--------------|----------|--|
| Computar | 5mm | 51.4 degrees |
| Fujinon | 3.8–13mm | 25.86 - 2.38 degrees |
| Pentax/Ricoh | 4.2mm | 64 degrees |
| | 6mm | 43.6 degrees |
| Senko | 1.87mm | 180 degrees with camera modification |
| Theia | 1.28mm | 125 degree (rectilinear lens) N.B. Image will be inverted |

If you have a specific requirement please contact SeeSense for advice.

Accessories

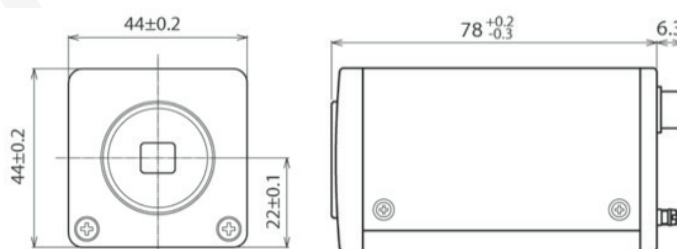
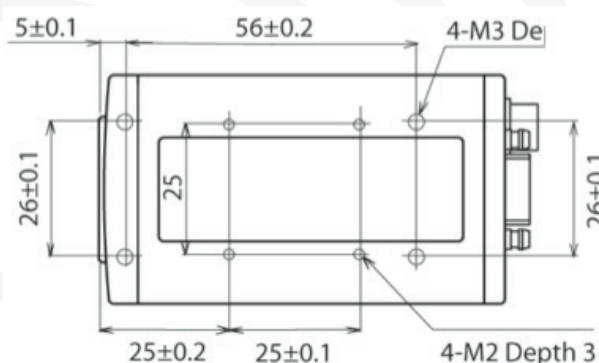
For simple and free USB image capture software we can recommend

Debut Video Capture Software from NCH Software.

Power Supply

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|----------|-----------|-----------------------------|
| Toshiba | ACM-601E | Medical grade power supply. |
| SeeSense | SS-PSU-xx | Own brand power supply |

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