



lens for illustration purposes only

Specifications:

- Ultra compact (approx 44 x 44 x 78mm) one-piece system
- Outputs full 1920 x 1080 pixels at 60 fps.
- Output selectable between 1080i & 1080p
- Utilises 1/3" CMOS 2.1 megapixel sensor
- On-screen menu
- Weight 150 g. (without lens)
- Digital DVI and Analogue RGB interface
- Auto and manual white balance
- Auto and manual electronic shutter
- C-mount (SeeSense CS-mount IK-HR1Q option also available)

The Toshiba IK-HR1D 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 imagery from a one piece camera body. It is ideal for imaging objects in motion with sharp detail and little or no motion artifacts.

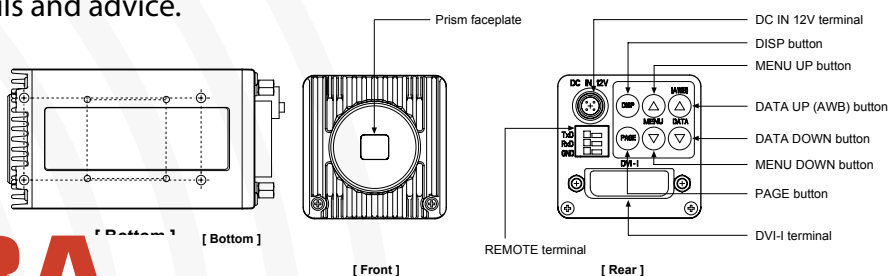
Contact SeeSense for lens options for the Toshiba IK-HR1D.

SeeSense are able to provide full 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.

This camera has many suitable applications in the following industries:

- Broadcast
 - Natural History
 - In Car
 - Sports
 - Goal Camera
 - POV Camera
- Medical
- Scientific imaging / diagnostics
- Homeland security
- Industrial video / inspection
 - Underwater (compact housing or ROV)
 - Aerial including UAV



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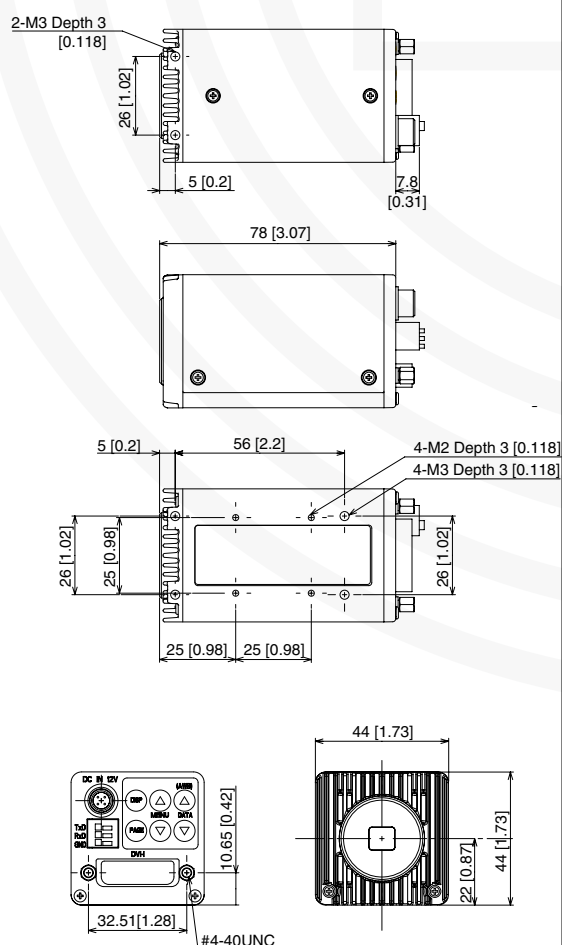
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Specification Performance

Power Requirements	12 V DC \pm 10% DCIN connector (4pin)
Power Consumption	Approx. 4 watts
Image Sensor	1/3" progressive scan CMOS
Output Pixels	Horizontal: 1920, Vertical: 1080
Scanning System	Progressive (1080p)/Interlace (1080i) Switchable
Sync / Freq	[Progressive (1080p)] - H:67.43kHz, V:59.94Hz [Interlace (1080i)] - H:33.71kHz, V:59.94Hz
Sensitivity	F/4 standard (2000 lux, 3000K)
Min. Illumination	16 lux standard (50 IRE, f1.4, gain + 12 dB), Gamma setting ON (setting value 0), 3000K
Frame Rate	60 fps 1080i and 1080p
Video Signal Output	Digital output (DVI-I connector output) 8bit X RGB Analogue output (DVI-I connector output)
Sync. Signal Output	Analogue output (DVI-1 connector output) H: 5V + 0.5V/1.0V (p) V: 5V + 0.5V/-1.0V (p)
Sync. System	Internal
Camera 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	Les than 90% (non-condensing)

Specification Features

Shutter	Manual – Off (1/60s), 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
Remote Control	RS-232C: Baud rate 9600bps/19200bps



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	4.2mm	64 degrees
	6mm	43.6 degrees
Senko	1.87mm	with camera modification
Theia	1.28mm	125 degree rectilinear lens

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

All lenses available from SeeSense

Power Supply

Toshiba ACM-601E Medical grade power supply

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