

# IK-HD5

3-CMOS 1080p  
HD VIDEO CAMERA



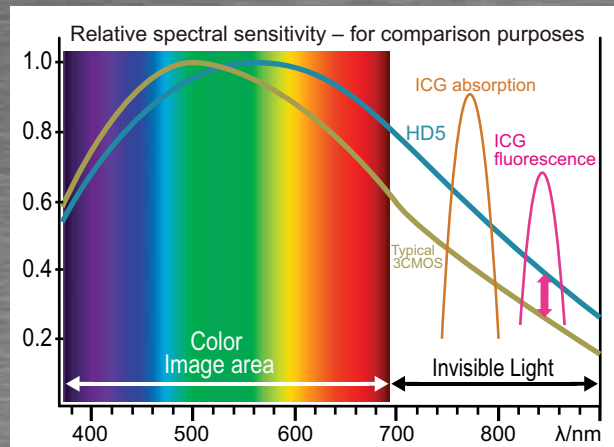
## Features

- 3-CMOS HD Sensors, 2.1MP, progressive, 1/2.9"
- 3G-SDI/HD-SDI and DVI-D output, 1920 x 1080
- Switchable between 1080p and 1080i
- Up to 1,000 TV lines resolution
- 5 User-configurable scene files
- Binning mode for 4x increase in sensitivity
- Image flip and mirror
- Gen-lock for 3D and multi-camera use
- Remote control via RS232
- C-mount lens mount

## For enhanced near-infrared applications

- Removable optical low pass filter
- Provides switchable output between full-HD video in visible and near-infrared spectrums
- Approximately 3dB increased sensitivity in near IR
- Expanded menu functions for red filter IR mode

Toshiba introduces the latest 3-CMOS camera innovation, a progressive-scan full-HD 1080p/1080i video camera featuring 3G-SDI/HD-SDI and DVI-D outputs and removable optical low pass filter (OLPF) for dual-mode imaging applications switchable between visible light and near-infrared visualization. This HD camera can be used for any HD video application as well as applications which use fluorescing agents. While the IK-HD5 is not an approved IEC60601 medical device, its imaging capabilities are well-suited as a component of surgical microscopy, endoscopy, IR inspection and defense imaging systems.



Incorporating Toshiba's innovative three-chip technology, the IK-HD5 provides approximately 3dB increased sensitivity in the near-infrared spectrum through 700-870 nm. When equipped with the appropriate optics and filters, the IK-HD5 can be used for both visible light and near IR imaging applications such as indocyanine green (ICG) and other fluorescing agents.



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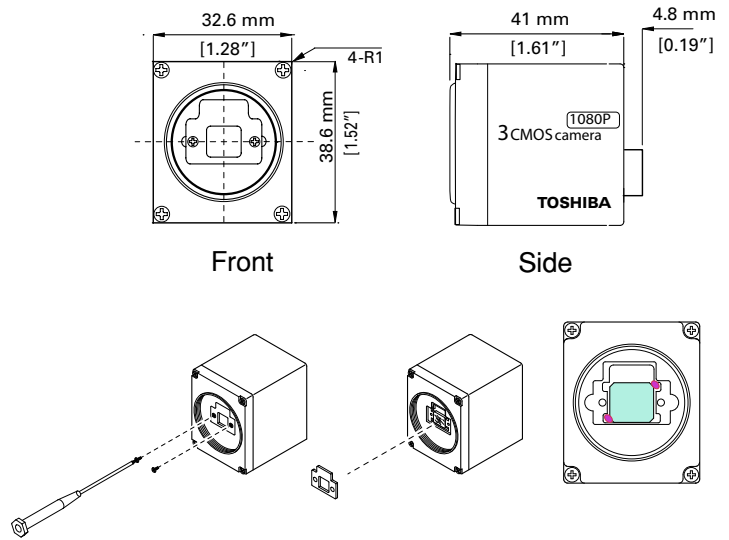
# IK-HD5

## Camera Head Specifications

### IK-HD5H

Image Sensor	3-CMOS, 1/2.9 inch, 2.1MP progressive
Output Resolution	Horizontal : 1920, Vertical : 1080
Resolution : H : V	1000 TV lines standard 1000 TV lines standard
Sensitivity	F10 standard (59.94 Hz setting) F11 standard (50 Hz setting) (at 2000 lx, 3000 K)
Minimum Illumination	4.8 lx (59.94 Hz setting) 4.0 lx (50 Hz setting) at F2.2, 20 dB, BINNING: ON 9.6 lx (59.94 Hz setting) 8.0 lx (50 Hz setting) at F2.2, 20 dB, BINNING: OFF
S/N Ratio	56 dB standard AGC: OFF, Gamma: OFF, Enhance: OFF
Operating Temperature	0°C to 40°C / 32°F to 104°F
Operating Humidity	Less than 90% (non-condensing)
Weight	Approx. 93 g (3.3 oz)
Dimensions	W: 32.6 mm H: 38.6 mm D: 41 mm (1.28" x 1.52" x 1.61") Protruding portion is not included

## Camera Head Exterior Dimensions



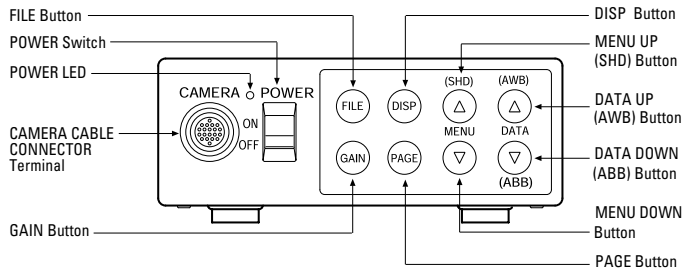
## IK-HD5E Controller Specifications

Power Supply	12V DC±10%
Power Consumption	10.3 W
Scanning System	Progressive / Interlaced (Selectable)
Scan Frequency	H: 67.433 kHz, V:59.94 Hz :1080p / 59.94 Hz H: 56.250 kHz, V:50 Hz :1080p / 50 Hz H: 33.716 kHz, V:59.94 Hz :1080i / 59.94 Hz H: 28.125 kHz, V:50 Hz :1080i / 50 Hz
Operating Temperature	0°C to 40°C / 32°F to 104°F
Operating Humidity	Less than 90% (non-condensing)
Weight	Approx. 600 g (1.32 lbs.)
Dimensions	W: 110 mm, H: 40 mm, D: 186 mm (4.33" x 1.58" x 7.32")
Scene Files	5 User-configurable scene files
White Balance	Auto / Manual (Selectable)
Gain	Auto (-15dB to 20dB); Manual (-15dB to 20 dB), OFF
Output Signal	DVI-D / 3G-SDI or HD-SDI
Electronic Shutter	Auto / Manual (OFF 1/60 - 1/10,000) / Syncro Scan

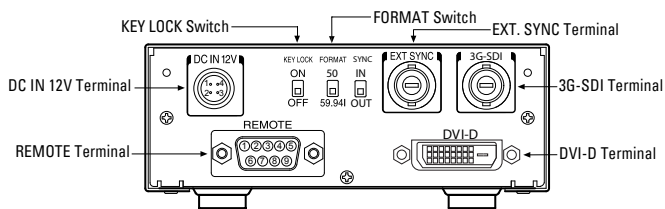
Complies to FCC Part 15 Subpart B, Class A, EN61000-6-4, EN6000-6-2  
Toshiba environmental management exceeds RoHS

## Controller Front and Back Panels

### IK-HD5E FRONT



### IK-HD5E REAR



## System Components

For further details, contact your Toshiba ME/FA distributor.

### CAMERA HEAD

IK-HD5H

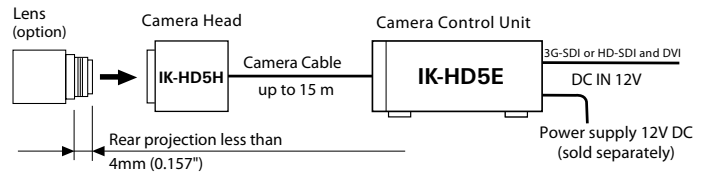
### CAMERA CONTROL UNIT

IK-HD5E

### CAMERA CABLE

Model	Length
EXC-3HD03	3 m
EXC-3HD06	6 m
EXC-3HD10	10 m
EXC-3HD15	15 m

## Connection



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When used for medical imaging applications, the customer assumes full responsibility and liabilities to determine suitability for use as well as responsibility for documentation and testing to comply with relevant medical device standards. Toshiba assumes no liabilities for such applications.

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