

# IK-HR1H

ULTRA SMALL HD 1080i/1080p/720p  
CMOS REMOTE HEAD CAMERA



## Features

- Ultra small (approx. 1.18" x 1.37" x 1.41")
- 1/3" progressive scan CMOS sensor
- Two versions available:
  - DVI-I (720p/1080i /1080p) and
  - HD-SDI (720p/1080i)
- Weighs only 1.76 oz. (without lens)
- Auto and manual white balance
- Auto and manual electronic shutter
- Optional 3, 5, or 10 meter cables
- C-mount lens ready

## Applications

- Life sciences / diagnostic imaging
- Specialty broadcast / reality TV / sports
- Microscopy
- Aviation

## Get Maximum Flexibility with our Miniature High-Definition Remote Head Camera.

Toshiba's incredible IK-HR1H CMOS-based Color Camera System gives you power-packed HD performance in a tiny, lightweight package. Choose from two controller configurations for maximum flexibility and options. Let Toshiba bring your project to HD life.



**TOSHIBA**  
Leading Innovation >>>

# IK-HR1H CMOS Color Camera Head

## Performance Specifications

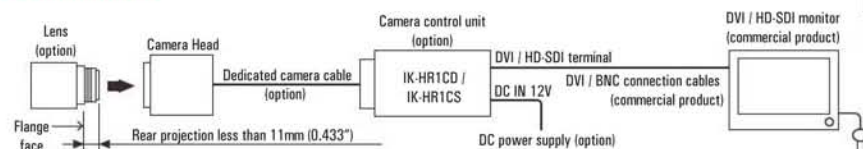
	IK-HR1CD with IK-HR1H	IK-HR1CS with IK-HR1H
Power supply	12 VDC ± 10% DCIN connector (4 pin)	12 VDC ± 10% DCIN connector (4 pin)
Power consumption	Approx. 6.2W (including the camera head)	Approx. 5.5W (including the camera head)
Image sensor	1/3" progressive scan color CMOS	1/3" progressive scan color CMOS
Output pixels 1080	Horizontal : 1920, Vertical : 1080	Horizontal : 1920, Vertical : 1080
Output pixels 720	Horizontal : 1280, Vertical : 720	Horizontal : 1280, Vertical : 720
Sync system	Internal	Internal
Video signal output	Digital output (DVI-I connector output) 8 bit X RGB Analog output (DVI-I connector output) 1080p @ 60 fps, 1080i @ 30 fps, 720p @ 60 fps (switchable)	SDI: (Serial Digital Interface) (BNC connector output) Based upon SMPTE 292M 1080i @ 30 fps, 720p @ 60 fps (switchable)
Sensitivity	F4 Standard (at 2000lx, 3000K, 1/60s)	F4 Standard (at 2000lx, 3000K, 1/60s)
Minimum illumination	8 lux std., (50 IRE, F1.4, Gain + 18dB, Gamma Setting ON (setting value 0), 3000K)	
Dimension & Weight	IK-HR1H (HEAD) W: 30, H: 35, D: 36 (mm) Approx 50g IK-HR1CD (CCU) W: 44, H: 44, D: 77.5 (mm) Approx 146g	IK-HR1H (HEAD) W: 30, H: 35, D: 36 (mm) Approx 50g IK-HR1CD (CCU) W: 44, H: 44, D: 77.5 (mm) Approx 146g
Operating temperature	0° ~ +40°C (32° F ~ 140° F)	0° ~ +40°C (32° F ~ 140° F)
Storage temperature	-20°C ~ +60°C (-4° F ~ 140° F)	-20°C ~ +60°C (-4° F ~ 140° F)

## Feature Specifications

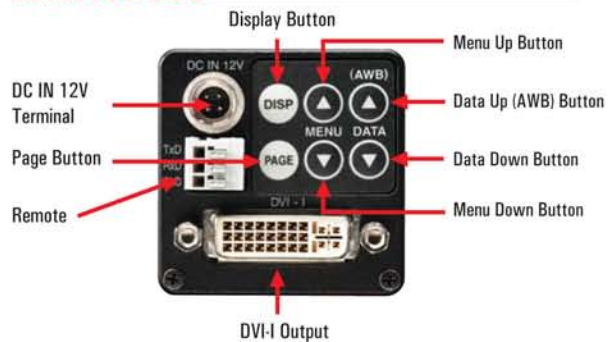
	IK-HR1CD with IK-HR1H	IK-HR1CS with IK-HR1H
Shutter	AUTO / MANUAL / SS (Synchro Scan) AUTO : Peak / Average / Response speed / Area MANUAL : OFF, 1/100s, 1/125s, 1/250s, 1/500s, 1/1000s, 1/2000s, 1/4000s, 1/8000s, 1/16000s, 1/32000s, SS (Synchro Scan) : 2/1125H ~ 1123/1125H	AUTO / MANUAL / SS (Synchro Scan) AUTO : Peak / Average / Response speed / Area MANUAL : OFF, 1/100s, 1/125s, 1/250s, 1/500s, 1/1000s, 1/2000s, 1/4000s SS (Synchro Scan) : [1080i mode] OFF, 2/1125H ~ 1123/1125H [720p mode] OFF, 2/750H ~ 748/750H
Gamma	OFF / ON : -10 ~ 0 ~ 10 step control	OFF / ON : -10 ~ 0 ~ 10 step control
Gain Control	OFF / ON : 0 ~ 12dB 1dB step	OFF / ON : 0 ~ 12dB 1dB step
White Balance	AWB / ATW / MANUAL AWB : 3200 K/5600 K ATW : 3000 ~ 6000 K MANUAL: R,B level adjustment 3200 K/5600 K	AWB / ATW / MANUAL AWB : 3200 K/5600 K ATW : 3000 ~ 6000 K MANUAL: R,B level adjustment 3200 K/5600 K
Scene file setting	5 files A/B/C/D/E	5 files A/B/C/D/E
Remote control	RS-232C protocol: Baud rate 9600bps/19200bps (Rx/D, Tx/D, GND)	RS-232C protocol: Baud rate 9600bps/19200bps (Rx/D, Tx/D, GND)

Design and specifications are subject to change without notice.

## Connection



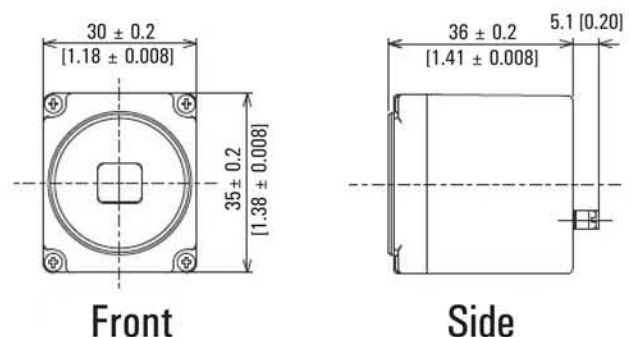
## IK-HR1CD CCU



## IK-HR1CS CCU



## Exterior Dimensions



## System Components

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

### Camera System

IK-HR1H Camera Head

### Camera Cable

Model	Length
EXC-HR03	3 m
EXC-HR05	5 m
EXC-HR10	10 m

### Camera Control Units

IK-HD1CD	DVI Output
IK-HD1CS	HD-SDI Output