

IK-TU51



features

**Toshiba's first 3CCD Remote Head
Camera offered with digital output
and a choice of 1/3 inch or 1/2 inch
image sensors**

*Powerful resolution, interchangeable
heads and digital imaging provide better
image quality and versatility*

Imaging Video Products Group

TOSHIBA

The Toshiba IK-TU51 color video camera is an ideal solution for machine vision, microscopy, broadcast and other imaging applications

- Remote heads with choice of 1/3 inch (IK-TU53H) or 1/2 inch (IK-TU52H) IT Exview™ HAD CCD's
- LVDS Digital and RGB Analog Outputs
- 800 lines of resolution
- One or Two-pulse triggers
- Six vector color enhancement circuit
- Frame memory allows continuous video imaging in integration mode
- .02 Lux at 4 second exposure
- 14-step detail enhancement
- Freeze frame
- 10-Bit Digital Signal Processing
- 64 dB signal-to-noise ratio
- C-Mount

IK-TU51

s p e c i f i c a t i o n s

Pick Up System	3CCD, RGB Micro Prism System
Image Sensor	IK-TU52H: 1/2-inch IT Exview™ HAD CCD or IK-TU53H: 1/3-inch IT Exview HAD CCD
Effective Pixels	NTSC: 768 (H) x 494 (V) PAL: 752 (H) x 582 (V)
Scanning System	2:1 Interlaced
Scan Frequency	Horizontal: 15.734 kHz Vertical: 59.94 Hz
Sync System	Internal/External Automatic Switching
Resolution	IK-TU52H: 800 Horizontal Television Lines IK-TU53H: 750 Horizontal Television Lines
Sensitivity	Minimum 1/2 inch: 2 Lux (F1.4, 20dB Gain Up 1/60 sec), .02 Lux at 4 sec Exposure Nominal 1/2 inch: 2000 Lux (F5.6) Minimum 1/3 inch: 4 Lux (F2.2, +20dB Gain up 1/60 sec), .04 Lux at 4 sec Exposure Nominal 1/3 inch: 2000 Lux (F8)
Signal/Noise Ratio	64dB
Lens Mount	C-Mount (Flange back focal length 17.526 mm in air)
Ambient Operating Temperature	0-40° C (32-104° F)
Ambient Humidity	< 90% Relative
Scene Files (User Memories)	A, B, C
White Balance Modes	ATW (Auto Tracing White) AWB (Push to Set White) MANU (Manual White)
Gain Modes	AUTO (Automatic Gain Control to +20dB) MANU (Manual Gain Control in 1 dB steps to +20dB) Norm (0dB or OFF)
Electronic Shutter Modes	MANU (Manual Shutter 8 Steps, 1/60 to 1/10,000 sec) AUTO (Automatic Shutter) SS (Synchro Scan) 1/525H - 260/525H, Integration to 3600 fields/frames (1 minute)
Color Corrector	6 axis color enhancement circuit (R, G, B, Cy, Y, Mg)
Output Signals	VBS: 75 Ohm Unbalanced, BNC Connector, NTSC Standard Y/C: 75 Ohm Unbalanced, S-VHS Terminal RGB or Y/PR/PB: 75 Ohm Unbalanced, D-Sub 9 pin connector VBS or Y/C: 75 Ohm Unbalanced, D-Sub 9 Pin Connector Digital RGB: LVDS, 10 bit/color, 120 Pin Molex Connector (Molex Part Number 52755)
External Sync Output	VBS/BB: 75 Ohm Unbalanced, Sync Negative, BNC Connector Sync: 0.286V, Burst: 0.286V, HD or VD: 2-5V (p-p) Negative
Sync Signal Output	Sync: 2.5V ± 1V (p-p) 75 Ohm Unbalanced HD or VD: 5V +.5, -1.0 (p-p) Negative, Load Impedance >10K Ohms
Two Pulse Trigger	Trigger: Low = < .5V, High = 4-5V, Positive
Video Index Output	Index: Low = < .5V, High = 4-5V, Negative Load Impedance > 10K Ohms
Remote Control Interface	Serial Data Interface (RS-232C Standard)
Optional Accessories	Camera Cables (3, 6, 10, 30 meters length), Power Supply (12VDC, .8A)
Power Requirements	12 VDC, .8 Amps
Weight	IK-TU51CU: 710g; IK-TU53H: 55g; IK-TU52H: 80g
Dimensions	IK-TU51CU: 110mm (W) x 40mm (H) x 156mm (D) IK-TU53H: 40mm(H) x 32.5(W) x 40.2mm(D) IK-TU52H: 42mm(H) x 34(W) x 46.5mm(D)

Exview™ is a registered trademark of the Sony Corporation

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