

IK-TF5



f e a t u r e s

Toshiba's First Progressive Scan Three Chip Color Camera

*IK-TF5 images accurate color and
produces maximum spatial resolution
of fast moving objects*

This compact one piece camera is ideally designed to capture high resolution color images of high speed machine vision processes. Image-jitter is eliminated through the use of Progressive Scan CCD's. The TF-5 has a Partial Scan mode that can output 180 frames per second.

- Three Progressive Scan CCD's
- RS-232 (9600 or 19200 BAUD rate)
- 180 Frames/Sec Partial Scan Output
- 1/100 to 1/100,000 Sec. Electronic Shutter
- One or Two Pulse Random Trigger
- C-Mount
- Square Pixels
- Lightweight (5.74 ozs.), Compact Design
- Economically Priced

Imaging Video Products Group

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IK-TF5

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

Pick-up system	3 CCD RGB Micro Prisms
Image sensor (Effective Pixels)	1/3 inch CCD (Horizontal: 659 Pixels, Vertical: 494 Pixels)
Pixel Size	7.4 μm (H) x 7.4 μm (V)
Scanning System	Progressive Scan
Scan Frequency	Horizontal: 31.469 kHz; Vertical: 59.94 Hz
Sync System	Internal/External (Automatic Switching)
Horizontal Resolution	500 TV Lines
Sensitivity	F6.8 Standard (2000 lx, 3000K)
Minimum Illumination	14 lx (F2.2, Sensitivity + 18 dB, 3000K)
SN Ratio	62 dB Standard (G)
Lens Mount	C mount (Flange Back: 17.526 mm in-air)
Ambient Temperature	32 to 104° F (0 to 40° C)
Ambient Humidity	Less than 90%
White Balance	AWB (Automatic White Balance) MANUAL (Manual) 3200k or 5600k Selectable
Gain	OFF (0 dB), Manual (-3 to 18dB)
Electronic Shutter	Manual (1/100 to 1/100,000 sec.) Synchro Scan (1 to 512 Frames)
Output Signal	RGB: 75 Ω unbalanced, D sub 15 Pin Connector
External Sync Input	HD or VD: 2-5V(p-p) Negative
Sync Signal Output	SYNC: 2.0V \pm 1 V(p-p) 75 Ω unbalanced HD, VD, INDEX: 5V $\begin{smallmatrix} +0.5 \\ -1.0 \end{smallmatrix}$ V(p-p), Negative Load Impedance: More than 10kW
External Trigger Input	TRIGGER: Low level: Less than 0.4V, High level: 3.4.-5V 1 Pulse: Positive/Negative/Width selectable 2 Pulse: Positive/Negative/Width selectable
Interface	Serial Data Interface (RS-232C); BAUD Rate (9600 or 19200)
External Dimension	1.73" (W) x 1.73" (H) x 3.07" (D) (44 (W) x 44 (H) x 78 (D) mm) (except for protruded portion)
Weight	Approx. 5.74 oz. (165 g)
Power Supply	DC 12V \pm 10%
Power Consumption	Approx. 4.3W
Standard	FCC Class A, CE

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