

FS-3200T-10GE-NNC

3.2 megapixel 3-CMOS multi-spectral







- Multi-spectral prism camera with three 1/1.8" CMOS imagers
- Simultaneously captures images in visible color and two near-IR wavebands
- Prism technology insures all three images share the same optical path
- 3.45 x 3.45 µm pixel sizes with support for 1x2, 2x1, or 2x2 binning on NIR channels
- Up to 107 fps over high performance 10GBASE-T (10 gigabits per second) interface
- Backwards compatible to NBASE-T (5GBASE-T/2.5GBASE-T) and standard GigE (1000BASE-T)
- Single and multi-ROI modes provide higher speeds with lower processing loads
- 8, 10, or 12-bits per channel*
- Supports separate or unified control of key camera parameters for each channel
- Excellent shock and vibration resistance
- GigE Vision 2.0 interface with triple-stream output
- C-mount lens mount
 - * Some video processing functions not available with 12-bit output



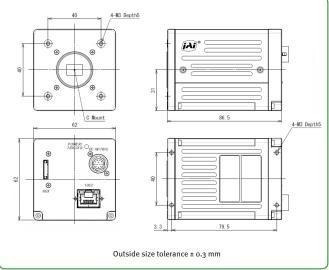
Specifications FS-3200T-10GE Sensor 1/1.8" 3-CMOS global shutter (IMX252) 2048 (h) x 1536 (v) x 3 (Bayer / NIR / NIR) Active pixels Frame rate, full frame 107.2 frames/sec. @ 8-bit Active area 7.07 mm (h) x 5.30 mm (v) - 8.83 mm diagonal Pixel size 3.45 µm x 3.45 µm System clock 74.25 MHz (for pulse generator) Read-out modes 2048 (h) x 1536 (v) for each channel ROI (single) H: 16 to 2048 pixels in 16 pixel steps V: 8 to 1536 lines in 4 line steps ROI (multi) Up to 64 areas can be defined. No overlap. Binning 1X2, 2X1, 2X2 (NIR channels only) EMVA 1288 Parameters 12-bit output format Absolute sensitivity 4.30 p (λ = 525 nm), 8.86 p (λ = 810 nm) Maximum SNR 39.45 dB green, 39.02 dB NIR Traditional SNR* >60 dB (o dB gain, 10-bit) NIR >60 dB (o dB gain, 10-bit) Video signal output[†] Visible: BayerRG8, BayerRG10, BayerRG10Packed, (Three streams) BayerRG12, BayerRG12Packed NIR: Mono8, Mono10, Mono10Packed, Mono12, Mono12Packed Normal, Single ROI, Multi ROI, Sequencer (2 modes) Video modes Manual control - master mode o to +24 dB R/B channels - individually -7 to +15 dB Auto gain control - off, continuous, one-push White balance Off, 4 presets (3200K, 5000K, 6500K, 7500K), or (Color channel only) one-push/continuous AWB (3000K to 9000K) Gamma/LUT 0.45 to 1.0 (9 steps) or 257-point programmable LUT Shading correction Flat shading, color shading Trigger input Opto In (2), Pulse Generators (4), Software, TTL In (2), NAND Out (2), User Output (4) Exposure modes Timed/EPS, Trigger Width (to ∞), Auto. Reset Continuous Trigger (RCT) option. Electronic shutter (can be set independently for each channel) 14.73 µs to 8 sec. in 1 µs steps Auto Level Control (ALC) Shutter range from 100 µs, gain range from o dB to +24 dB. Tracking speeds and max. values adjustable. Blemish compensation Up to 1736 px/sensor Operating temp. (ambient) -5°C to +45°C (20 to 80% non-condensing) Storage temp. (ambient) -25°C to +60°C (20 to 80% non condensing) Vibration 3G (20 Hz to 200 Hz, XYZ directions) Shock 50G Regulations CE (EN 55032:2015, EN 55035:2017) FCC Part 15 Class B, RoHS/WEEE Power 12-pin +10V to +25V DC. 11.6 W typical @ +12 V Lens mount C-mount Dimensions (H x W x L) 62 mm x 62 mm x 86.5 mm (excl. connectors) Weight

Ordering Information

	FS-3200T-10GE-NNC	3-CMOS multi-spectral camera with GigE Vision
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^{*}Traditional SNR is based on random noise in a single frame, where EMVA SNR measurements consider more comprehensive noise sources and variance over time.

Dimensions



Connector pin-out

DC In / Trigger (1) (9) (2 ്⊚ `8 \ .3 19 19 0 @ ₆

HIROSE HR10A-10R-12PB(71)

- 1 Ground
 - DC in +10V to +25V
 - Opto In 2-
 - Opto In 2+ Opto In 1-

 - Opto In 1+
 - Opto Out 1-Opto Out 1+
 - TTL out 1
 - 10 TTL in 1
 - DC in +10V to +25 V
 - Ground

GigE Vision Interface

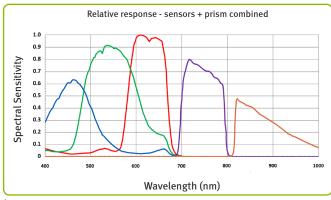


RJ-45 with locking screws

Pin	Signal
1	TRD+ (o)
2	TRD- (o)
3	TRD+ (1)
4	TRD+ (2)
5	TRD- (2)
6	TRD- (1)
7	TRD+ (3)
8	TRD- (3)

See manual for pin-out of auxilliary

Spectral response



 $[\]dagger_{12}$ -bit output available in video processing bypass mode. See manual for details.

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