TMX-DHD series

Full HD daylight cameras
for full motion video
in mission crticial situations

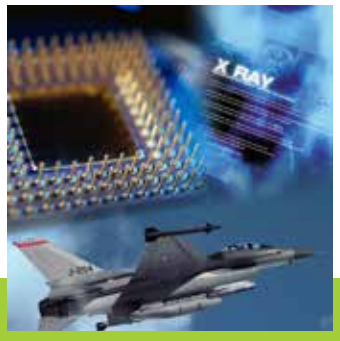
Description

The **TMX**-DHD series provides 2 megapixel images at 61 frames per second. Based on sensitive 1/2” and 2/3” CCD image sensors, these cameras delivers crisp images under difficult lighting conditions. Combined with high NIR sensitivity of the image sensor, the low blooming, smear and noise behavior make it suitable for challenging applications like outdoor, medical and machine vision systems. The different variations of mechanical design allows for easy integration into system architectures.

The **TMX**-DHD series increases detection, recognition and identification ranges, making it ideal for UAVs, security and long range observation systems.

Key benefits

- Full HD up to 61 fps
- Optimized for life-time extension & upgrade programs
- Superior performance under all light conditions
- Low failure rate & extended life-time
- MIL-STD-810G qualified
- Compact & light remote head design



Adimec

Adimec is the leading supplier of high-end cameras for machine vision, medical and outdoor imaging applications. Our Adimec True Accurate Imaging® technology forms the foundation for a broad range of camera products, and brings new levels of precision and accuracy to vision systems.

Adimec
Excellence in Imaging

Available models

TMX-DHD series

Model Specifications

		TMX6-DHD & **TMX7**-DHD	**TMX8**-DHD & **TMX9**-DHD Preliminary
Sensor	Type	ICX674, 2/3” Interline CCD	ICX687, 1/2” Interline CCD
	Resolution	1940 x 1460	1940 x 1460
	Pixel size	4.54 µm x 4.54 µm	3.69 µm x 3.69 µm
	Noise Equivalent Illumination (3200 K light source, typical value w.o. lens)	0.031 mLux·s (monochrome) 0.144 mLux·s (Bayer & Color)	0.05 mLux·s (monochrome) 0.22 mLux·s (Bayer & Color)
	Dynamic range	62 dB	59 dB
	Smear surpression	105 dB	105 dB
Video output	Camera Link	1920 x 1080 Monochrome / Color / Bayer 61 fps (Mono & Bayer) 32 fps (Color)	1920 x 1080 Monochrome / Color / Bayer 30 fps
	HD-SDI	1080P / 720P Monochrome / Color 30 / 29.97 / 25 fps (1080P30) 60 / 59.94 / 50 fps (720P60)	1080P / 720P Monochrome / Color 30 / 29.97 / 25 fps
	Analog (**TMX6**-DHD & **TMX8**-DHD only)	YPbPr CVBS (PAL / NTSC) Y/C (PAL / NTSC)	YPbPr CVBS (PAL / NTSC) Y/C (PAL / NTSC)

Specifications

for all models

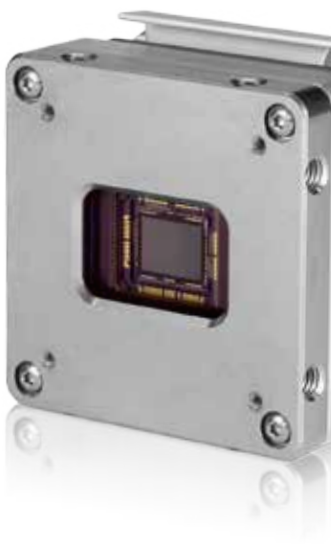
Camera & iris control	Iris control	Analog controlled
	Triggering & External Sync.	I/O & Camera Link (if applicable)
	Serial communication	RS-422 & Camera Link (if applicable)
Power	Power input	10 - 30 Vdc
	Power consumption	< 7 W
Mechanical	Lens mount	C-Mount (optional)
	Dimensions	See last page
Environmental	Operating temperature	-40°C to +71°C
	Reliability	MTBF > 33,000 h @ 55°C
	Compliance	CE, ROHS, MIL-STD-810G
	Testing	Acceptance test procedures & environmental stress screening

Functionality

for all models

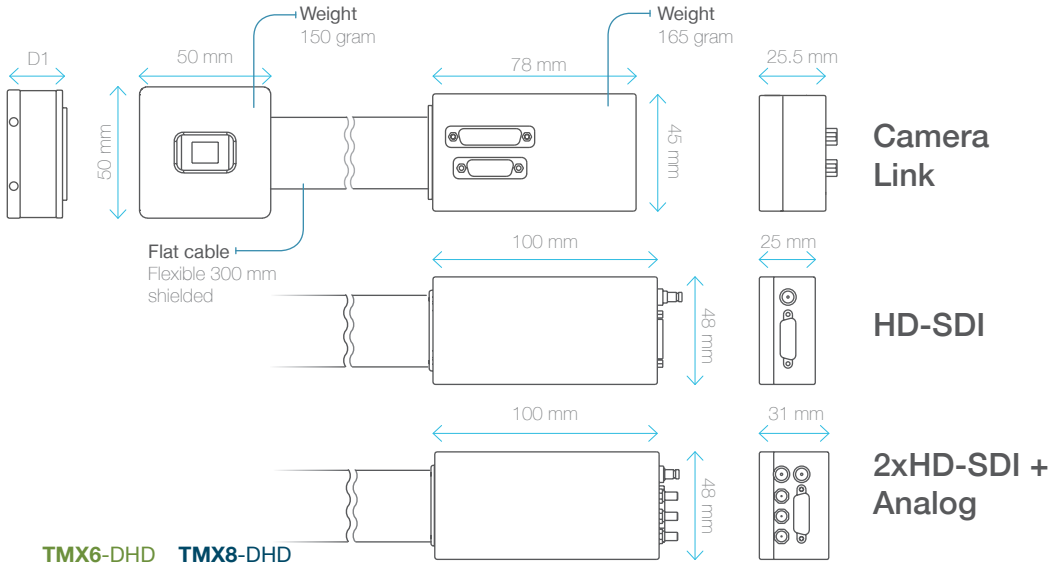
		Mono	Bayer	Color
Video enhancement	Auto exposure control	√	√	√
	Auto white balance	-	√	√
	Manual white balance	-	√	√
	Contrast enhancement	√	√	√
	Color saturation control	-	-	√
	Edge enhancement	-	-	√
	Defect pixel correction	√	√	√
	Gamma correction	√	√	√
Signal processing	Digital zoom (4x)	-	-	√
	i-Zoom (analog output)	-	-	√
	Image flip (H & V)	√	√	√
	Binning	√	√	√[1]
	Region of interest	√	√	√
	Bore sighting	√	√	√
	Selectable cross hairs	√	√	√
	Image tagging	√	√	√
Service	Frame counter	√	√	√
	Temperature readout	√	√	√
	Elapsed time	√	√	√
	Testpattern	√	√	√
	Built-in tests	√	√	√

[1]Only in raw bayer mode



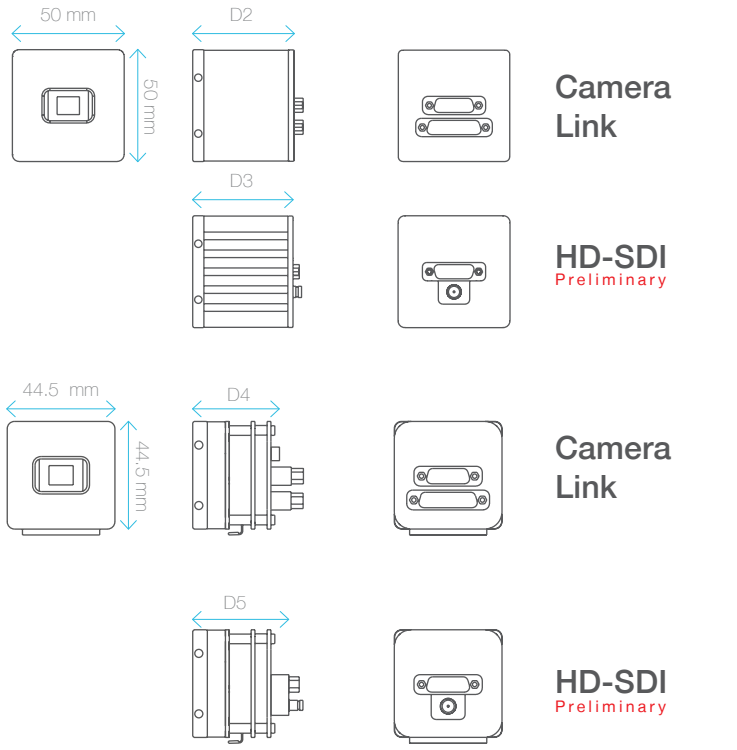
Dimensions

TMX6-DHD & TMX8-DHD



in mm	TMX6-DHD	TMX8-DHD
D1	22.0	20.5

TMX7-DHD & TMX9-DHD



in mm	TMX7-DHD	TMX9-DHD
D2	45.0	43.5
D3	44.8	43.3
D4	37.4	35.9
D5	38.3	36.8

Custom cameras

Adimec has the ability to offer additional camera functionality and create customer specific cameras even for small volume programs. Built from platforms, our standard line of cameras give us a flexible base that can be tailored to fit your specifications. Contact us to discuss these options in more detail.

For maximum image quality, performance, and reliability in demanding applications - Choose Adimec

North America
Phone: (+1) 781-279-0770
Fax: (+1) 781-279-0771
E-mail salesus@adimec.com

Europe
Phone: (+31) 40-2353920
Fax: (+31) 40-2353925
E-mail: saleseu@adimec.com

Japan & Korea
Phone: (+81) 3-5968-8377
Fax: (+81) 3-5968-8388
E-mail: salesjp@adimec.com

Asia - Pacific
Phone: (+65) 6334-1236
Fax: (+65) 6334-1436
E-mail: salesap@adimec.com

Adimec
www.adimec.com