

DEWE-CAM-01

- VGA 640 x 480 progressive CCD
- Up to 70 fps @ full resolution
- High quality color correction algorithm
- Super compact size
- Ready for C-Mount lenses
- Wide-range manual / auto gain
Manual / auto exposure (shutter)
Gamma on / off
Real time shading correction
- Optically decoupled asynchronous trigger-shutter
- External trigger input for synchronization including frame index
- Lockable IEEE1394 connector



Standard Models

Instruments

For Your Computer

Signal Conditioning

Components

DEWE-CAM-01	
Specifications	
Image device type	1/2 (diag. 8 mm) progressive scan, SONY
Picture size	640 x 480 pixels
Cell size	9.9 µm x 9.9 µm
Resolution depth	12 bit (ADC)
Lens mount	C-Mount
Digital interface	IEEE 1394 IIDC v. 1.3
Transfer rates	100 Mbit/s, 200 Mbit/s and 400 Mbit/s
Frame rates	Up to 74 Hz in full resolution, higher rates with AOI
Gain control	Manual: 0 to 24 dB (0.035 dB/step); Auto gain (select. AOI)
Shutter speed	20 to 67.108.864 µs (67 s); auto shutter (select. AOI)
External trigger	Yes
Shutter trigger	Yes
Smart features	Real time shading correction; built in FIFO memory up to 17 frames
Power requirements	8 to 36 V _{DC} via IEEE 1394 cable or 12-pin HIROSE
Power consumption	Less than 3 W (@ 12 V _{DC})
Dimensions (L x W x H)	72 x 44 x 29 mm (2.8 x 1.7x 1.1 in.) w/o tripod and lens
Mass	< 120 g (without lens)
Temperature	Operating: +5 to +45 °C; Storage: -10 to +60 °C
Regulations	EN 55022, EN 61000, EN 55024, FCC Class B; DIN ISO 9022
Package information	
Each DEWE-CAM-01 package consists of	
1 DEWE-CAM-01 camera	
1 C-MOUNT lense 6 mm, F 1.2, Iris 1.2 to 16, screw fixing for focus and iris, 42 x 46 mm / 125 g	
1 IEEE 1394 cable (4.5 m)	
1 Trigger cable (4.5 m)	
1 Mounting plate (for tripod or suction cup mounting)	
1 Suction cup	
1 Protection bag	
Benchmark examples	
Base system: DEWE-2520, Intel Pentium M 1.8 GHz, 1 GB RAM, SATA-HDD 250 GB, DEWESoft 6.5	
with DEWE-ORION-1616 @ 16x 80 kS/s, 2 counter, 16 digital channels, 2 CAN channels:	4 cameras @ 30 fps at full resolution
with DEWE-ORION-1616 @ 16x 40 kS/s, 2 counter, 16 digital channels, 2 CAN channels:	2 cameras @ 70 fps at full resolution
with DEWE-ORION-1616 @ 16x 500 kS/s, 2 counter, 16 digital channels, 2 CAN channels:	1 camera @ 130 fps at 640 x 240
with DEWE-ORION-1616 @ 16x 500 kS/s, 2 counter, 16 digital channels, 2 CAN channels:	1 camera @ 200 fps at 640 x 120

DEWE-CAM01 AOI (Area Of Interest)			
AOI width [pixel]	AOI height [pixel]	Frame rate [fps]	Tf / ms
640	494	74.15	13.49
640	480	76.02	13.15
640	400	88.79	11.26
640	320	106.71	9.37
640	240	133.71	7.48
640	120	215.48	4.64
640	20	439.41	2.28

DEWE-CAM-01: frame rates at different areas of interest



DEWE-CAM-01 package with cables, suction cup and protection bag



DEWE-CAM-01 connectors and mounting plate

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