

# microdrones GmbH



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## Data sheet

Ppdc12mp still photography, 12mp,  
Picture stabilization, 1GB memory card, infrared trigger, zoom control 3 x ,tilt controlled  
camera mount

<u>CCD</u>	1/1.7 " 12 megapixel CCD and 3X optical smc lens.
<u>Storage Formats</u>	JPEG, DIVX-AVI, WAV
<u>Focal Length</u>	- 7.9mm - 23.7mm 35mm Equivalent - 37mm -111mm Aperture Range - F2.8 - F5.4, Optical Zoom - 3X
<u>Image Stabilizer</u>	Shake Reduction (CCD-shift)
<u>ISO Sensitivity</u>	manual 50,100,200,400,800,1600,3200 with 5 MP, ISO auto 50-800
<u>Recording Image Size (Pixels ) 4:3 Aspect Ratio</u>	Still Image: 4000x3000 pixel resolution
<u>OSD Language</u>	English, French, German, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkish, Russian, Thai, Korean, Chinese, Japanese
<u>Interface</u>	Type - AV output terminal, USB terminal, DC input terminal Video Output - Compatible with NTSC and PAL formats (monaural sound)



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## Data sheet

Ppdc videography, the video function of this still photography camera is the ideal solution for onboard video. Resolution: 1280 x 720 and 848 x 480 / 30 frames / sec, picture stabilization, 1GB memory card, tilt controlled camera mount



<u>CCD</u>	1/2.33", 10.7 Total Mega Pixels CCD, Primary Color Filter
<u>Storage Formats</u>	MOV, Motion Picture: QuickTime Motion JPEG
<u>Focal Length</u>	f=4.4-17.6mm (35mm equiv: 25-100mm)
<u>Image Stabilizer</u>	Shake Reduction (CCD-shift)
<u>ISO Sensitivity</u>	Auto / 100 / 200 / 400 / 800 / 1250 / 1600 (High Sensitivity Mode: Auto(1600-6400))
<u>Recording Image Size</u>	Movie: 848x480 - 1280x720 pixels
<u>OSD Language</u>	English, French, German, Spanish, Italian, Japanese
<u>Interface</u>	Type - AV output terminal, USB terminal, DC input terminal Video Output - Compatible with NTSC and PAL formats (monaural sound)



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## Data sheet

Pdcvc470 daylight color video camera, composite video, 470 tv-lines, tilt controlled camera mount



<u>CCD Sensor</u>	1/3" IL CCD
<u>Active pixels (HxV)</u>	755x582
<u>Horizontal resolution (TVL)</u>	480 TVL
<u>Sensitivity</u>	0,1 lux
<u>Signal to noise ratio</u>	> 48 dB (AGC off)
<u>Balance Mode</u>	AWB auto white mode (fixed modes selectable via Software)
<u>Contour enhancement</u>	Default on
<u>Iris Control</u>	CCD Iris



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## Data sheet

Pdbwvc570 dawn b/w video camera, composite video, 570 tv-lines, 0.0003 lux, f1.4, tilt controlled camera mount



TV version	EIA	CCIR
<u>Sensor:</u>	1/2 " CCD image sensor	
<u>Resolution:</u>	811(h) x 508 (V) 768 (h) x 494 (v)	795(h) x 596 (v) 752 (h) x 582 (v)
<u>Unit cell size</u>	8,4 μm(h) x 9.8 μm(v)	8,6 μm(h) x 8.3 μm(v)
<u>Sync. system</u>	internal	
<u>Scanning system</u>	2:1 Interlaced	
<u>Video output</u>	1Vp-p 75 Ohm (unbalanced)	
<u>Horizontal resolution</u>	570 TV Lines (center)	
<u>minimum illumination</u>	0,0003 lux F1.4	
<u>S/N Ratio</u>	46dB (AGC off, y=1)	
<u>E.I. (electronic Iris)</u>	1/60 ~ 1/100,00 sec	1/50 ~ 1/100,00 sec
<u>Backlight compensation</u>	on	
<u>Operating temperature</u>	-10 <sup>0</sup> ~+40 <sup>0</sup> C	



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## Data sheet                      Infrared camera

<u>Material, Structure &amp; Format</u>	Amorphous Silicon Microbolometer Spectral
<u>Response</u>	7-14 $\mu\text{m}$ (filter bandwidth)
<u>Thermal Sensitivity</u>	<50mK
<u>Refresh Rate</u>	Real-time 30Hz
<u>Start-up Time</u>	2,4 sec +/- 10% @ 25 $^{\circ}$ C
<u>Contrast/Brightness</u>	Automatic/Advanced Image Processing
<u>Saturation Temperature</u>	1100 $^{\circ}$ F (600 $^{\circ}$ C) +/-10% w/automatic electronic iris
<u>Range to detect Human Activity</u>	up to 330 Feet (100 meters)
<u>Optic</u>	FocalLength 5.8 mm, Field of View ~50 $^{\circ}$ x 37 $^{\circ}$
<u>Focus Method</u>	Manual/Temperature stabilized
<u>Video</u>	Analog Output NTSC (color); Real-Time 30hz Frame Rate, PAL (color); Real-time 25 hz Frame Rate
<u>Output Resolution</u>	NTSC: 640 x 480 pixels PAL 768x574 pixels
<u>Absolute Color</u>	3 OEM selcstable color points are mapped to absolute temperatures
<u>Controls</u>	Camera Setup & Communication USB 2.0
<u>Operating Temperature</u>	-4 $^{\circ}$ F to 185 $^{\circ}$ F (-20 $^{\circ}$ C to 85 $^{\circ}$ C)

