

# ATOM one Family



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All ATOM cameras have a build in CCU (Color Control Unit) supporting the following features:

- Low latency (< 100 µs/microseconds)
- Defect Pixel Correction (auto/manual)
- Black level, White Level, Master Black
- White balance / Auto white balance
- Flare compensation
- Lens shading correction
- High quality color interpolation (debayer)
- Color Matrix / Color correction
- Color temperature settings/profiles
- Multi-matrix Color Correction (12/24/32 angles)
- RGB LUT programmable
- Knee function
- Denoise filter
- Detail filter
- Color post processing (lumi, contr, sat, hue)
- SDI range adjustable (black/white)
- Mirror/Flip
- Image statistics (white balance, exposure)
- Auto Exposure / Auto Gain

Documentation and software can be found at the following link:



<https://gitlab.com/dreamchip/provideo-downloads>

Further technical and commercial information can be found at:

[www.atom-one.de](http://www.atom-one.de)



## Contact



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## ATOM one mini

- Small SDI broadcast camera
- Ultra wide angle support

## ATOM one mini AIR

- Smallest SDI broadcast camera
- Ultra wide angle support

## ATOM one mini waterproof

- Smallest SDI broadcast waterproofed camera

## ATOM one

- Smallest global shutter SDI broadcast camera
- High Dynamic Range (HDR)

## ATOM one 4K mini 7

- Smallest UHD camera
- Ultra wide angle

## ATOM one 4K mini 11

- Smallest 4K 2/3" camera
- TV lens compatible

## ATOM one 4K mini 16

- Smallest 4K 1" global shutter camera
- High Dynamic Range (HDR)



	Item no.: 001-00018	Item no.: 001-00005	Item no.: 001-00019	Item no.: 001-00020	Item no.: 001-00021	Item no.: 001-00022	Item no.: 001-00023	
Overview	Resolution	Full HD 1920 x 1080	Full HD 1920 x 1080	Full HD 1920 x 1080	Full HD 1920x1080	UHD 3864 x 2196	4K 4096 x 2160	
	Mount	S Mount (M12)	S Mount (M12)	S Mount (M12)	C Mount	C Mount/CS Mount/S Mount	C Mount + CS Mount	
	Size	<b>30mm x 30mm x 31mm</b>	<b>30mm x 30mm x 18mm</b>	32mm x 32mm x 51mm	32mm x 32mm x 71mm	<b>36mm x 36mm x 79mm</b>	<b>36mm x 36mm x 79mm</b>	<b>36mm x 36mm x 79mm</b>
	Weight	45 g	25 g	115 g	100 g	122 g	123 g	123 g
	Mount points	2x 1/4" 5x M3	10x M3	3x 1/4" 5x M3	2x 1/4" 6x M3	2x 1/4" 5x M3	2x 1/4" 5x M3	2x 1/4" 5x M3
	Microphone	Mono Mic	Mono Mic	Mono Mic	No	Stereo Mic	Stereo Mic	Stereo Mic
	Sensor	Sensor Type	1 / 2.5"	1 / 2.5"	1 / 2.5"	1 / 1.23"	1/2.5"	<b>2/3"</b>
Pixel size		3.24 um	3.24 um	3.24 um	5.86 um	1.62 um	2.4 um	3.45 um
Diameter		7.2 mm	7.2 mm	7.2 mm	13.1 mm	7.2 mm	11 mm	16.1 mm
Filter		IR cut / no filter	IR cut / no filter	IR cut / no filter	IR cut	IR cut	IR cut	IR cut
Shutter type		Rolling	Rolling	Rolling	<b>Global</b>	Rolling	Rolling	<b>Global</b>
Dynamic		10 bit / 57dB	10 bit / 57dB	10 bit / 57dB	<b>12 bit / 72 dB</b>	10 bit / 57dB	10 bit / 57dB	<b>12 bit / 72 dB</b>
Sensitivity ISO		Analog 30 - 675 / Digital 3200	Analog 30 - 675 / Digital 3200	Analog 30 - 675 / Digital 3200	Analog 125 - 2000 / Digital 12800	Analog 30 - 675 / Digital 3200	Analog 45 - 1013 / Digital 6400	Analog 115 - 1840 / Digital 12800
Sensitivity 2000 Lx 50Hz		F2.4	F2.4	F2.4	F11	F2.4	F8	F6.7
Maxium FOV (H)		89° @ 2.7mm lens	89° @ 2.7mm lens	89° @ 3.4 mm lens	89° @ 6mm lens	89° @ 2.7mm lens	76° @ 6mm lens	98° @ 6mm lens
SDI output		1x HD-BNC/3G SDI	1x HD-BNC/3G SDI	1x HD-BNC/3G SDI	2x HD-BNC/3G SDI	2x HD-BNC/12G SDI	2x HD-BNC/12G SDI	2x HD-BNC/12G SDI
Electric	Control	RS485	RS485	RS485	RS485	RS485	RS485	
	Genlock	No	No	No	Trilevel Sync in / out	Trilevel Sync in / out	Trilevel Sync in / out	
	Embedded time code	yes	yes	yes	yes	yes	yes	yes
	Voltage range	5V-36V	5V-36V	5V-36V	6V-36V	9V-36V	9V-36V	9V-36V
	Power	3.4W 270mA@12V	3.4W 270mA@12V	3.4W 270mA@12V	3.4W 280mA@12V	6.5W 540mA@12V	7.6W 630mA@12V	8.3W 680mA@12V
	Power Supply	6-36V	6-36V	6-36V	6-36V	9V-36V	9V-36V	9V-36V
	Cooling	Passive	Passive	Passive	Passive	Active	Active	Active
Camera Features	Color Control Unit	yes	yes	yes	yes	yes	yes	
	4K to 2K down-scale with oversampling	no	no	no	no	yes	yes	
	Independent LUT	yes	yes	yes	yes	yes	yes	
Video Formats	10 bitYUV422	yes	yes	yes	yes	yes	yes	
	RAW	no	no	no	Yes	yes	yes	
	1920 x1080 Full HD Framerates	23.98, 24, 25, 29.97, 30, 50, 50.94, 60,50i 59.94i, 60i				no (can downscale to 1080 i/p)		
	3840 x 2160 UHD Framerates	no				23.98, 24, 25, 29.97, 30, 48, 47.96, 50,59.94, 60,50i 59.94i, 60i		
	4096 x 2160 4K Framerates	no				23.98, 24, 25, 29.97, 30, 48, 47.96, 50,59.94, 60,50i 59.94i, 60i		