



**Mitomo**  
since 1953



## Mini Broadcast Cameras

# ATOM ONE FAMILY

Smallest SDI Broadcast Quality Cameras

### ATOM ONE Mini



**Smallest SDI Broadcast Camera**  
FULL HD resolution  
RS 485 control + power on Hirose connector  
One 3G-SDI output  
Size : 30mmx30mmx31mm  
Weight : 45 g  
Rolling shutter  
Sensor size : 1/2.5"  
Mount : S-Mount  
Wide angle : 85° @3.4mm lens (included)  
Microphone (mono)  
multi matrix support

### ATOM ONE Mini Waterproof



**Smallest SDI Broadcast Waterproof Camera**  
FULL HD resolution  
RS 485 control + power on breakout cable  
One 3G-SDI output  
Size : 32mm x 32mm x 51mm  
Weight : 115 g  
Rolling shutter  
Sensor size : 1/2.5"  
Mount : S-Mount  
Wide angle : 85° @3.4mm lens (included)

### ATOM ONE Mini Air



**Smallest SDI Broadcast Camera**  
FULL HD resolution  
RS 485 control + power on breakout cable  
One 3G-SDI output  
Size : 30mm x 30mm x 18mm  
Weight : 25 g  
Rolling shutter  
Sensor size : 1/2.5"  
Mount : S-Mount  
Wide angle : 85° @3.4mm lens (included)  
Microphone (mono)  
multi matrix support

### ATOM ONE SSM500



**Smallest High-Speed Broadcast Camera**  
FULL HD resolution (1920x1080)  
Global Shutter  
Frame rate: up to 500 fps  
Dynamic: 300 fps 12 bit - 500 fps 10bit  
Video output: SSMmode (4x60p) or Trigger mode  
Recordingtime: @500fps 60 seconds  
RS 485 control and IP  
HDR Mode: HLG, PQ  
Size : 190mm x 60mm x 60mm  
Weight : 900 g  
Mount : C-Mount / B4-Mount  
multi matrix support

### ATOM ONE



#### Smallest Global Shutter / (HDR) Camera

FULL HD resolution  
RS 485 control + power on Hirose connector  
Two 3G-SDI output  
Genlock  
Size : 32mm x 32mm x 71mm  
Weight : 100 g  
Global shutter  
Sensor size : 1/1.23"  
Mount : C-Mount  
Wide angle : 90° @5mm lens  
HDR (HLG,PQ) – BT2020

### ATOM ONE4K Mini 7



#### Smallest UHD Camera / Ultra Wide Angle

4K resolution  
RS 485 control + power on Hirose connector  
Two 4K-SDI output (one can be downscaled to 3G)  
Genlock  
Size : 36mm x 36mm x 79mm  
Weight : 122 g  
Rolling shutter  
Sensor size : 1/2.5"  
Mount : S-Mount or C-Mount  
Wide angle : 85° @3.4mm lens (included)  
Microphone (stereo)

### ATOM ONE4K Mini 11



#### Smallest UHD Camera / B4 Lens Compatible

4K resolution  
RS 485 control + power on Hirose connector  
Two 4K-SDI output (one can be downscaled to 3G)  
Genlock  
Size : 36mm x 36mm x 79mm  
Weight : 123 g  
Rolling shutter  
Sensor size : 2/3"  
Mount : C-Mount  
Wide angle : 76° @6mm lens  
Microphone (stereo)

### ATOM ONE4K Mini 16



#### Smallest UHD Global Shutter Camera

4K resolution  
RS 485 control + power on Hirose connector  
Two 4K-SDI output (one can be downscaled to 3G)  
Genlock  
Size : 36mm x 36mm x 79mm  
Weight : 123 g  
Global shutter  
Sensor size : 1"  
Mount : C-Mount  
Wide angle : 98° @6mm lens  
Microphone (stereo)

DESIGN  
YOUR  
PICTURE

# Camera Overview

ATOM one mini	ATOM one mini AIR	ATOM one	ATOM one 4K mini 7	ATOM one 4K mini 11	ATOM one 4K mini 16
SDI搭載超小型放送用カメラ 広角レンズ付属	SDI搭載超小型放送用カメラ 広角レンズ付属	<ul style="list-style-type: none"> <li>グローバルシャッター搭載</li> <li>HDR対応小型放送用カメラ</li> </ul>	<ul style="list-style-type: none"> <li>超小型 UHD カメラ</li> <li>広角レンズ付属</li> </ul>	<ul style="list-style-type: none"> <li>超小型 4K 2/3" カメラ</li> <li>TV用レンズ対応 (B4アダプタ装着時)</li> </ul>	<ul style="list-style-type: none"> <li>グローバルシャッター搭載</li> <li>4K HDR対応カメラ</li> </ul>



	型番 : 001-00018	型番 : 001-00005	型番 : 001-00020	型番 : 001-00021	型番 : 001-00022	型番 : 001-00023	
Overview	Resolution	Full HD 1920 x 1080	Full HD 1920 x 1080	Full HD 1920 x 1080	UHD 3864 x 2196	4K 4096 x 2160	
	Mount	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 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	100 g	122 g	123 g	123 g
	Mount points	2x 1/4" 5x M3	10x 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	No	Stereo Mic	Stereo Mic	Stereo Mic
Sensor	Sensor Type	1 / 2.5"	1 / 2.5"	1 / 1.23"	1/2.5"	<b>2/3"</b>	<b>1"</b>
	Pixel size	3.24um	3.24um	5.86um	1.62um	2.4um	3.45um
	Diameter	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	IR cut	IR cut	IR cut
	Shutter type	Rolling	Rolling	<b>Global</b>	Rolling	Rolling	<b>Global</b>
	Dynamic	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 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	F11	F2.4	F8	F6.7
	Maxium FOV (H)	<b>125° @ 2.7mm lens</b>	<b>125° @ 2.7mm lens</b>	89° @ 6mm lens	<b>125° @ 2.7mm lens</b>	76° @ 6mm lens	<b>98° @ 6mm lens</b>
	Electric	SDI output	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
Control		RS485	RS485	RS485 / RS422 / UART 3.3V	RS485 / RS422 / UART 3.3V	RS485 / RS422 / UART 3.3V	
Genlock		No	No	Trilevel Sync in / out	Trilevel Sync in / out	Trilevel Sync in / out	
Voltage range		5V-36V	5V-36V	6V-36V	9V-36V	9V-36V	9V-36V
Power		3.4W 270mA@12V	3.4W 270mA@12V	3.4W 280mA@12V	6.5W 540mA@12V	7.6W 630mA@12V	8.3W 680mA@12V
Cooling		Passive	Passive	Passive	Active	Active	Active

## Image Processing Features

- Low latency (<100us)
- 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  
customising exposure with grid  
4K to 2K downscale with oversampling

## System Features

- Power supply 6-36V (2K) 9-36V (4K)
- RS485 Remote control / RS232 3.3V  
Open Protocol, Open Source GUI
- Embedded time code (supports REC start / stop)
- Genlock (Tri-Level Sync, in / out)

## Connectors

- Power / RS485 (Hirose HR10 male)
- Auxiliary connector (Aux power, 3.3V UART, Hirose HR 10 female)
- Dual SDI Output HD BNC  
Independent LUT / RAW / 4K to 2K downscale  
with oversampling
- Genlock In/Out HD BNC

## Video Formats

- Dual Video (2K) SDI 3G - (4K) SDI 12G Output  
10 BIT YUV422  
Raw (except Atom one mini)

- Resolutions / Framerates  
HD models: 1920x1080  
Framerates: 23.98, 24, 25, 29.97, 30, 50,  
50.94, 60, 50i 59.94i, 60i  
4K models: 3840x2160 / 4096x2160  
Framerates: 23.98, 24, 25, 29.97, 30, 48,  
47.96, 50, 59.94, 60, 50i 59.94i, 60i

## Accessories 別売周辺機器



351-00006  
mini HD-SDI to SDI Cable



350-00010  
RS485 to USB



350-00011  
ATOM one Power Cable



353-00007  
Power Supply



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