



AtomOne

CAMERAS

Foreword by MD
Peter Schaper

Pg. 4



Built for action. Small,
strong, versatile.

Pg. 12



An AtomOne for
every moment.

Pg. 25

www.atom-one.de

PROFESSIONAL BROADCAST CAMERAS



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Introduction

Hannover96—power, precision, passion:
camera and club aligned.

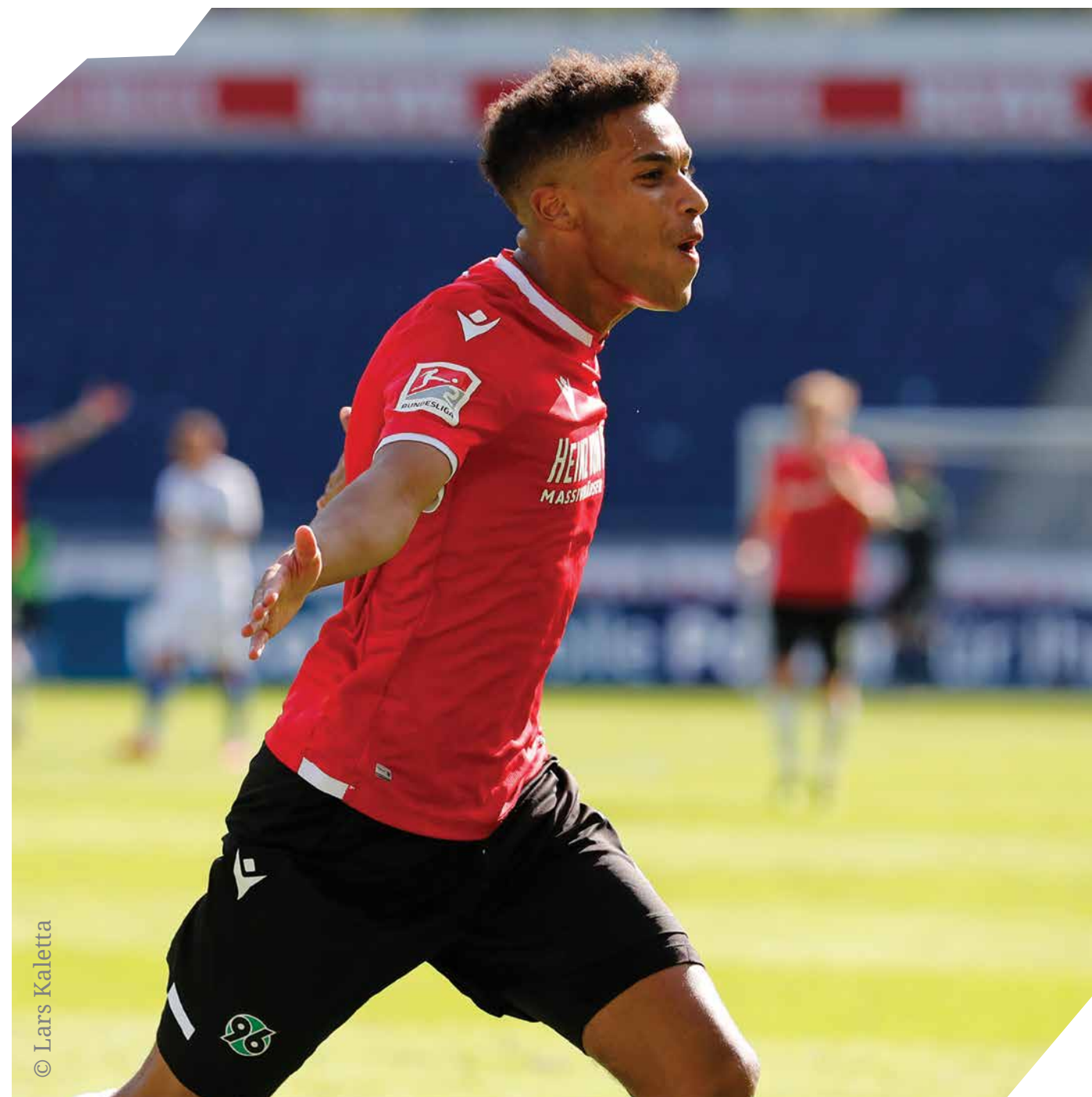
We are proud to partner with Hannover96; the flagship club of the Dream Chip endeavor. Their drive, energy and skill don't just embody everything that our cameras can capture, they embody all of the values that we at Dream Chip hold dear; tenacity, discipline and a desire to excel. And in our love and support of them, we remember our local Hannover roots even as we work to achieve a worldwide camera revolution: local passion, global reach.

Moreover, with their club motto 'Never Alone', they describe perfectly what our cameras achieve; they allow fans across the globe to be immersed in the moment – right there beside the players, the fans, the coaches – involved in every unique moment. Never Alone.

A stylized, handwritten signature in black ink, appearing to read 'P. Schaper'.

*Peter Schaper - Managing Director
Dream Chip Technologies*





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Hannover96: Their drive, energy and skill don't just embody everything that our cameras can capture, they embody all of the values that we at Dream Chip hold dear; tenacity, discipline and a desire to excel.

Tell your Story

Everybody has a story. How to tell it best?
Our products are developed with one reason
in mind, to allow you to tell your story.

But what's our story? AtomOne cameras are developed by Dream Chip, based in Germany. Whilst innovation and technological progression sit at the heart of what we do, what we're truly about is emotion: about allowing you to catch the detail and magic of a movement, or to immerse your viewer in a moment.

We're also proud to be working towards a more sustainable environment; maximising environmentally-friendly practices in our offices and minimising energy need and plastic in our products (which of course also carries the benefit of making them far more robust).





Read the article: Dream Chip's ATOM Cameras Take Viewers on David Blaine's Death-Defying Balloon Stunt with Him.



We used them under the most challenging of conditions and they performed exceptionally well in the heat of the Arizona desert all the way up to the freezing temperatures at high altitude. Combined with 3g's remote telemetry and video transmission systems, we maintained full control of them throughout the flight and watched the live images of David's flight in awe – along with the rest of the World!

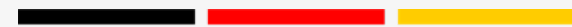
– Nathan Spencer, EIC – 3g Wireless

Built for action

Small, strong, versatile – with limitless application.

Our aim was to make a product where the only real limit was the imagination of the user. Full creative possibilities – facilitated by a camera that can be placed almost anywhere, giving a completely unique perspective on the subject matter. An unusual angle, a striking shot – these revolutionise the viewer experience.

And because our German build-quality makes our products tough and resistant, you can be sure they'll survive even the most challenging of environments.



Made in Germany





The camera looks spectacular. If you don't look very closely, you might not even notice it was a POV camera, and yet it's small enough to close your hand around. It's definitely the most impressive POV camera I've seen in years.

— MLB All Star

The Perfect Match

We make your workflow easier, not harder,
with Multimatrix colour matching.

We know that that the more elements you add to a workflow, the more complexity you bring to a project. But what if it didn't have to be this way?

The incorporation of Multimatrix colour matching technology means that once you have matched our AtomOne cameras with the other cameras in your production set-up, that's it, job done. No post-production colour correction, just seamless, real-time integration of your 'extra special' AtomOne shots with the more general, scene-setting images generated by your traditional camera rig. As you'd expect, all with HDR capture.

And of course, the incorporation of genlock makes real-time workflow all the easier too.

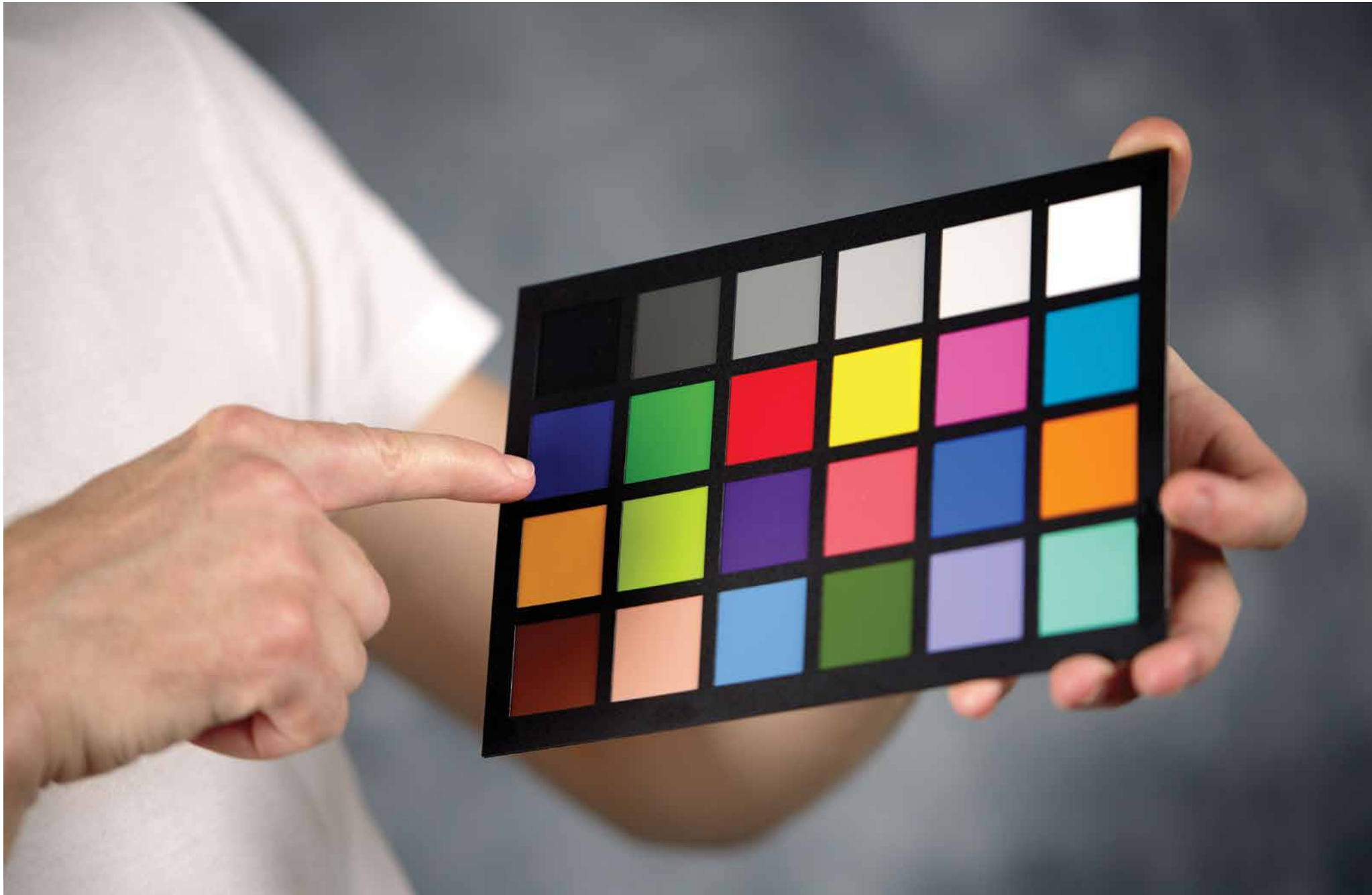


AtomOne

vs.



Sony HDC4300



Our test on Friday went pretty well, we managed to perfectly match the ATOM to a Sony HDC4300, so much so that we were at times struggling to tell which one was which!

— Malcolm Robinson, Broadcast Solutions GmbH

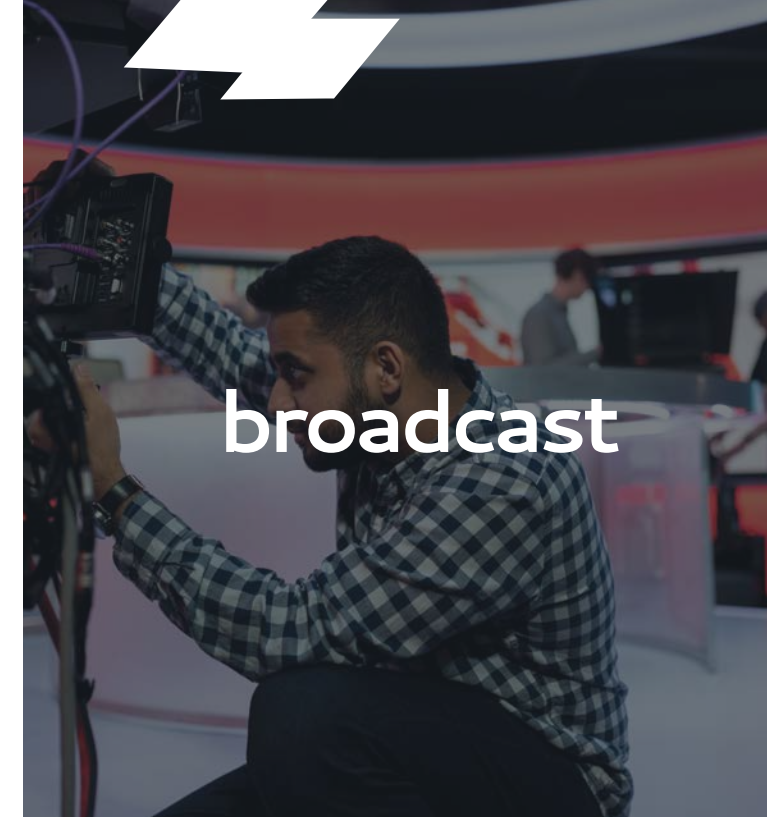
Catch every moment

Right in the moment, capturing emotion and beauty: first time, every time.

Why do we love sport? The grace and beauty of physical action? The emotion that comes with effort, commitment and passion? These are the things that need to be communicated in broadcast. AtomOne cameras make that possible.

A shot that captures a racing driver's every grimace and grin? An overhead volley slowed down to a tenth of the speed, capturing every sinew and muscle in movement? We do that. And most importantly, with our incredible build quality, we do it reliably. The perfect shot, every time.

Don't go thinking the applications are limited to sport though. Reality TV, e-sports, news, even traditional cinema: our cameras exist to allow creatives to truly realise their vision.



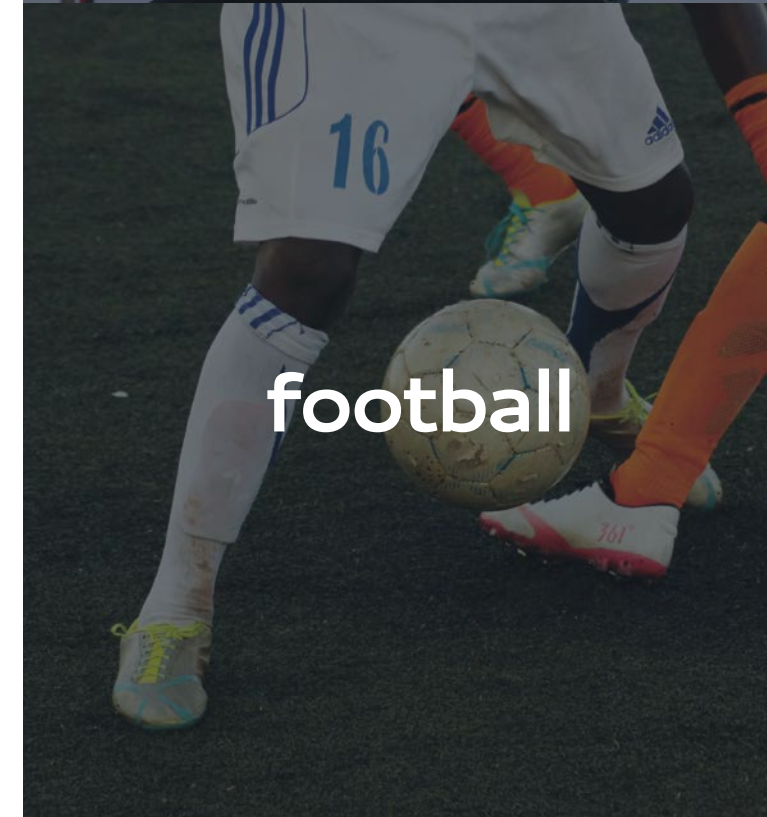
broadcast



cinema



e-sports



football



racing



reality TV

High Dynamic Range

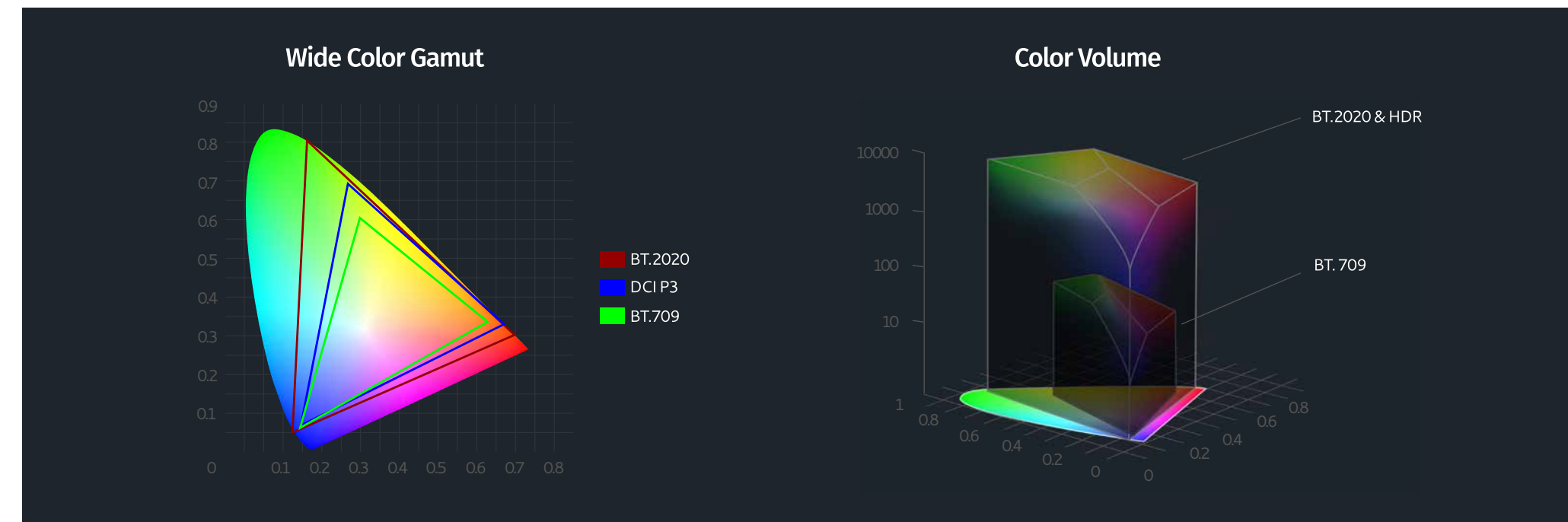
All AtomOne cameras use HDR in HLG, PQ and SLOG3



Broadcast your content with HDR

The central purpose of an AtomOne camera is to immerse the viewer in the moment, regardless of what they are watching. We leverage a range of technical tricks to do this; from the use of crystal clear capture through global shutters, the intense detail facilitated by HD and 4K, and in the case of our SSM500, the use of super-slow-motion.

But what else is key to that immersion? Colour. Be it vivid and bright or subtle and moody – colour impacts our emotional response and our perception of realism. Key to delivering exceptional image colour in our AtomOne range is the integration of HDR (High Dynamic Range); capturing multiple standard exposures and then merging them to provide a greater colour gamut and improved image quality through higher contrast and the reduction of shadow and blow-out.



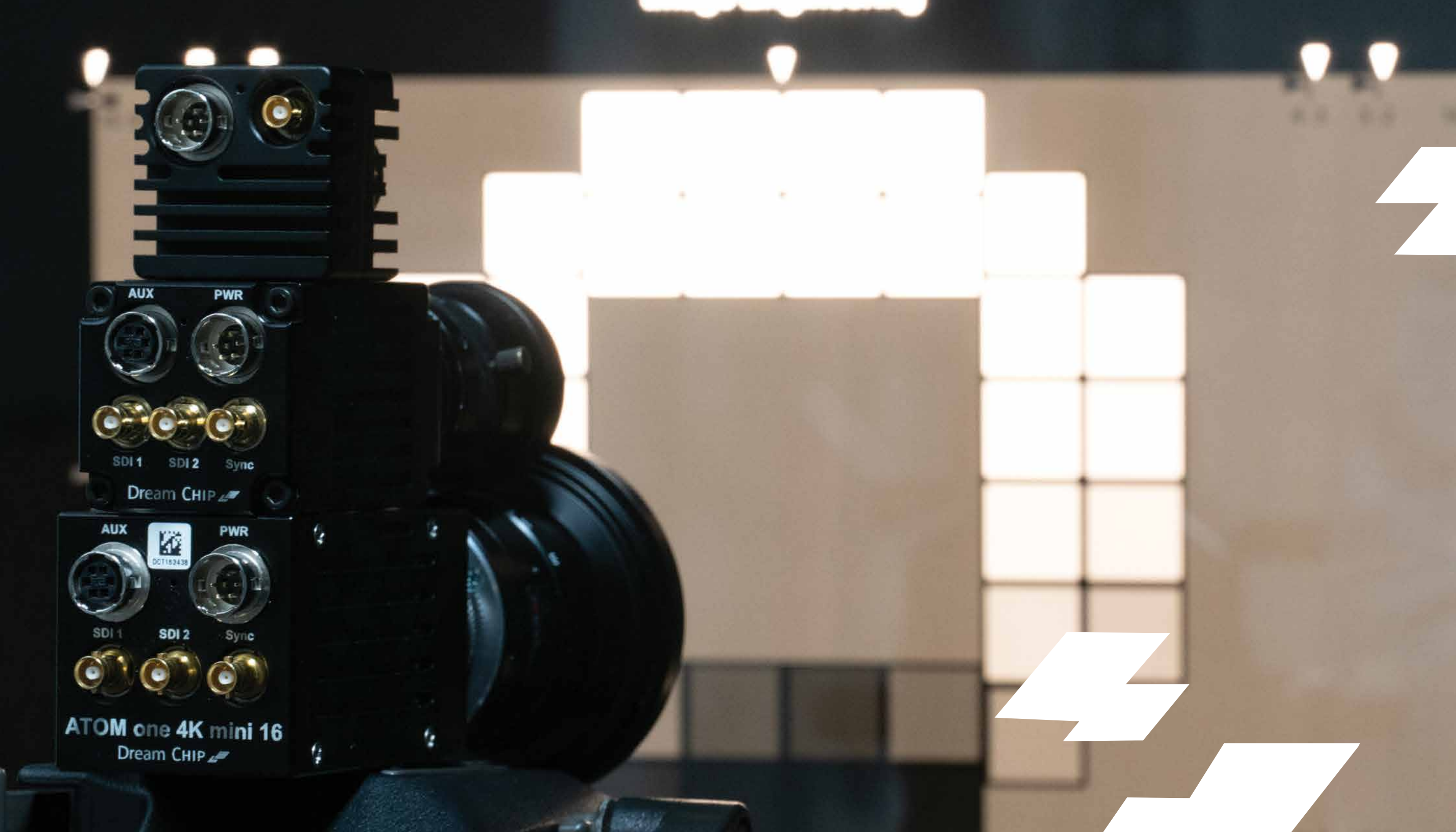
SDR Image

- limited contrast
- limited colours
- poor image quality



HDR Image

- Higher contrast
- More colours
- Better image quality



The AtomOne Family

An AtomOne for every moment.

We didn't just make one amazing micro-sized camera, we made a whole family! Depending on the application you have in mind, our series of cameras incorporates any number of options. Waterproof? No problem. Super-slow motion (500fps)? Yep, we do it. A choice between global or rolling shutter options, between HD and 4k, between C, S and B4 mount options? Of course.

Wherever you want to put an AtomOne, we have an option to meet your needs.

AtomOne mini

The smallest 2K SDI Broadcast Camera with Ultra Wide Angle Support.



Full HD Resolution 1920 x 1080

Shutter type: Rolling shutter

Sensor size: 1/2.5"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Interlaced Modes: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

SDI output: 1x HD-SDI output

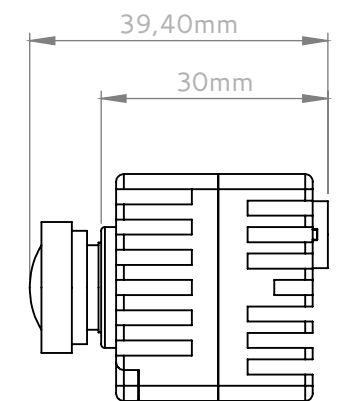
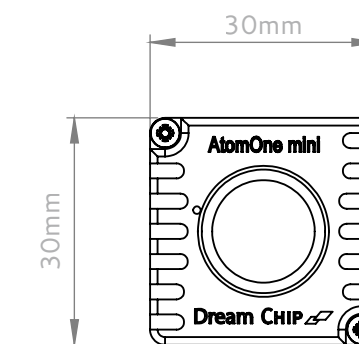
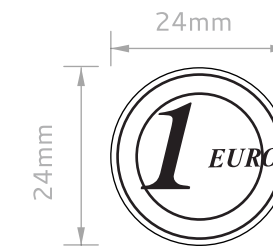
Mount: S Mount (M12)

Mount: 85° @3.4mm lens (included)

Microphone: Mono Mic

Size: 30mm x 30mm x 30mm

Weight: 45g



AtomOne mini AIR

The smallest SDI Broadcast Camera.



Full HD Resolution 1920 x 1080

Shutter type: Rolling shutter

Sensor size: 1/2.5"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Interlaced Modes: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

SDI output: 1x HD-SDI output

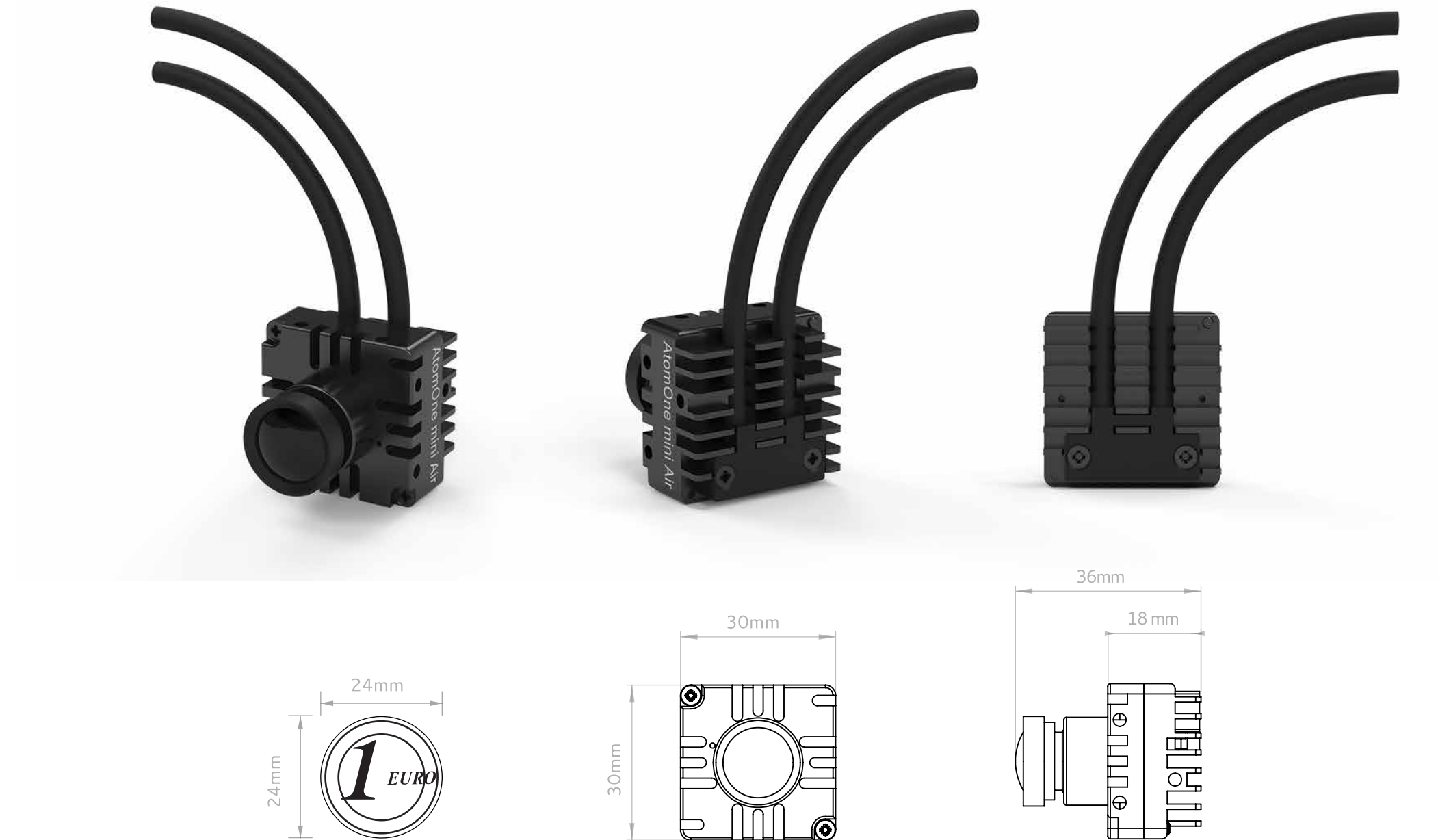
Mount: S Mount

Lens: 85°@3.4mm lens (included)

Microphone: Mono Mic

Size: 30mm x 30mm x 18mm

Weight: 25g



AtomOne mini Waterproof

The smallest Waterproof SDI Broadcast Camera.



Full HD Resolution 1920 x 1080

Shutter type: Rolling shutter

Sensor size: 1/2.5"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Interlaced Modes: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

SDI output: 1x HD-SDI output

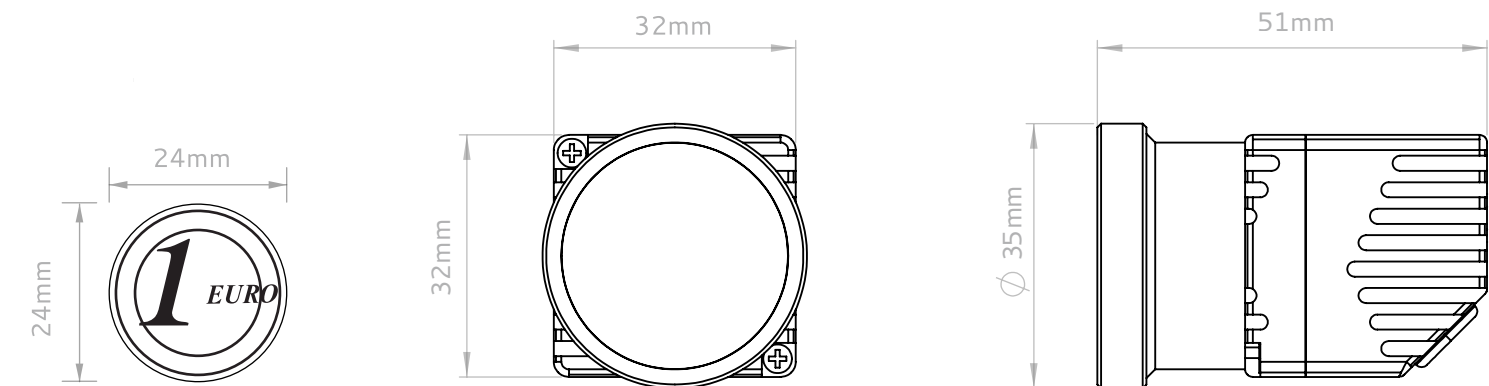
Mount: S Mount

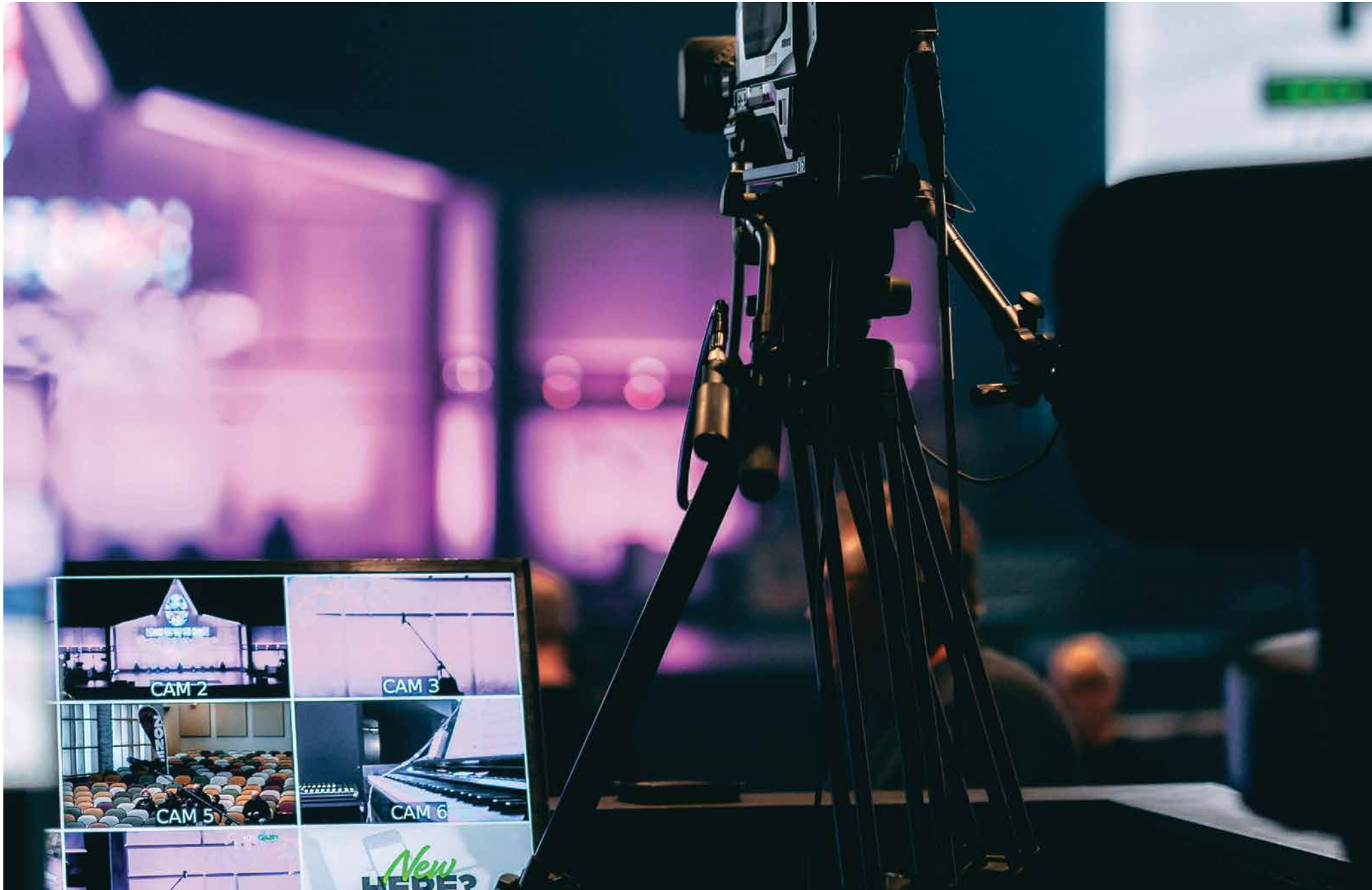
Lens: 85°@3.4mm lens (included)

Microphone: Mono Mic

Size: 32mm x 32mm x 51mm

Weight: 115g





We managed to perfectly match the AtomOne to a Sony HDC4300, so much so that we were at times struggling to tell which one was which!

— Malcolm Robinson, Broadcast Solutions GmbH

AtomOne

The smallest global shutter with High Dynamic Range (HDR) camera.



Shutter type: Global shutter

Sensor size: 1/1.23"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Interlaced Modes: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

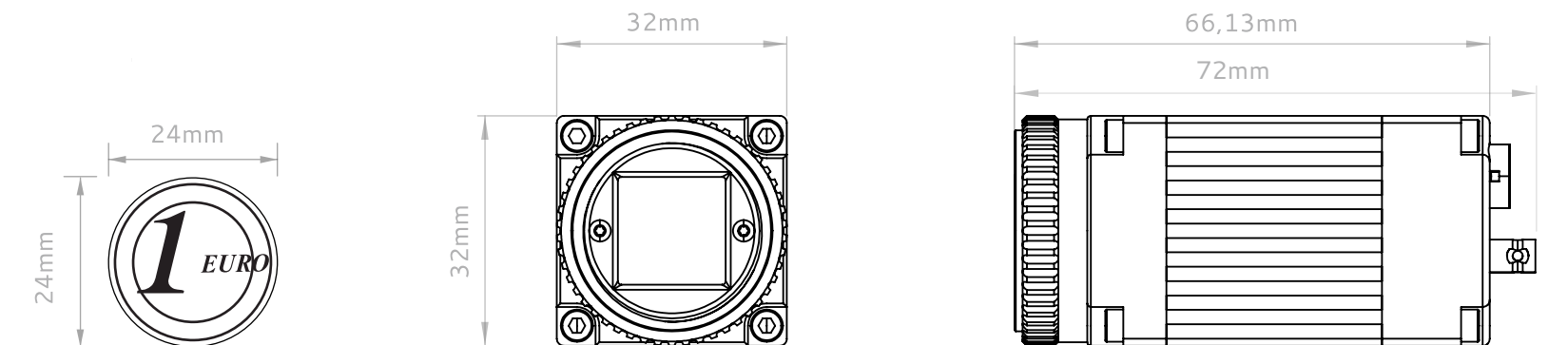
SDI output: 2x HD-SDI output

Genlock input

Mount: C Mount

Size: 32mm x 32mm x 72mm

Weight: 100g



AtomOne SSM500 C-Mount

Our deep, dark secret.

Conventional wisdom tells us that to shoot at a high frame rate, you need optimum lighting conditions. Well, at Dream Chip, when it comes to technology, we're not so keen on 'conventional wisdom'.

The exceptionally sensitive sensors of the SSM500 means that they capture crystal clear, super-slow-motion images even in low-light conditions. Atmospheric concerts, moonlit events, hidden corners, terrible weather- there's no escaping the eye of an SSM500.



AtomOne SSM500 C-Mount



Shutter type: Global shutter

Sensor size: 2/3"

Sensor Frame Rates: 50 - 500 fps

Progressive framerates: 23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60

Interlaced framerates: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Dynamic: 300 fps 12 bit - 500 fps 10bit

Color: multi matrix support

Control: RS 485

Video Output: SSM mode (4x60p) or Trigger mode

SDI output: 4x HD-SDI output

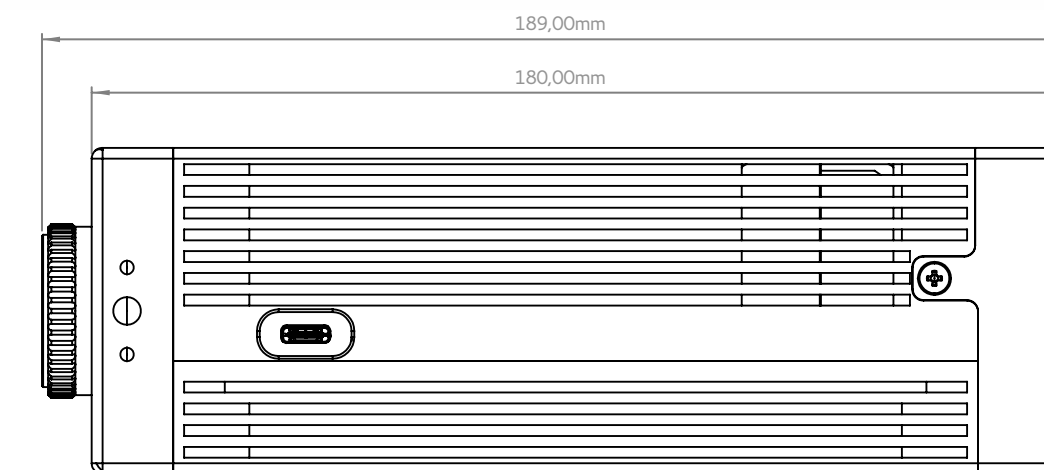
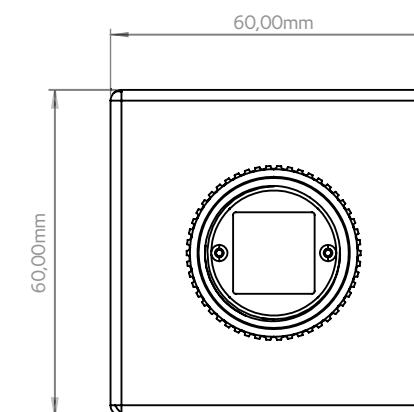
Genlock input

Mount: C Mount

Lens control: Motor Drive from Dream Chip

Size: 60mm x 60mm x 189mm

Weight: 900g



AtomOne SSM500 B4

Smallest high-speed broadcast camera.

Integration of a global shutter is key to the SSM500's ability to deliver crisp video; ensuring that balls stay round and lines stay clean. And with the ability to choose between either B4 or C mount option, not only are broadcasters able to integrate their existing equipment with the SSM500, but they are also able to frame the action to suit the moment. A pole crane-mounted span of the pitch from behind the goal? No problem, the C mount has it covered. Picking out the emotion of an individual concert-goer from across the venue? The B4 mount can do it.



AtomOne SSM500 B4

 Full HD Resolution 1920 x 1080

Shutter type: Global shutter

Sensor size: 2/3"

Sensor Frame Rates: 50 - 500 fps

Progressive framerates: 23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60

Interlaced framerates: 50i, 59.94i, 60i

HDR: HLG, PQ and SLOG3

Dynamic: 300 fps 12 bit - 500 fps 10bit

Color: multi matrix support

Control: RS 485

Video Output: SSM mode (4x60p) or Trigger mode

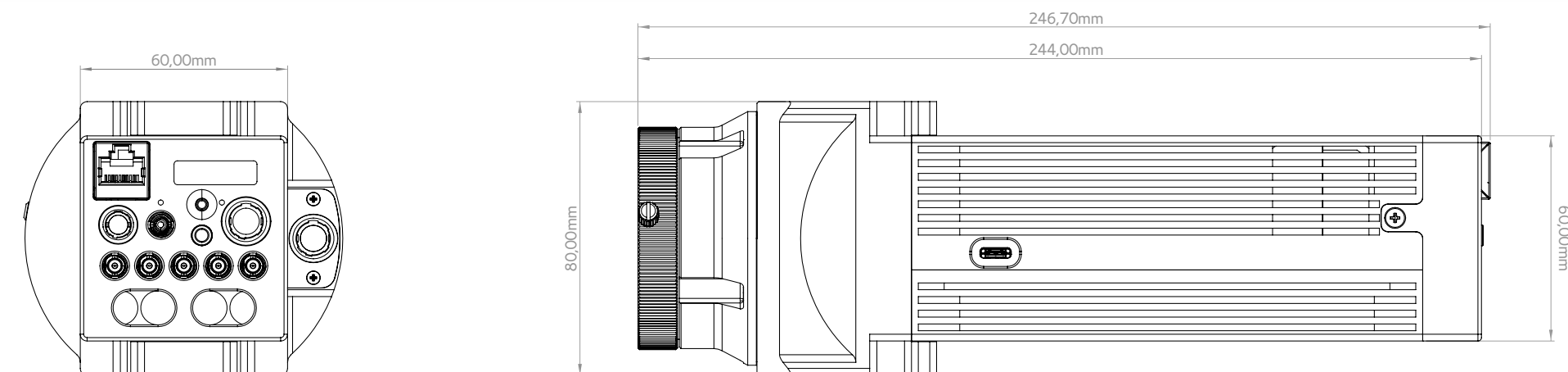
SDI output: 4x HD-SDI output

Genlock input

Mount: B4 Mount

Size: 92mm x 80mm x 244mm

Weight: 1700g



AtomOne mini Zoom

The smallest broadcast zoom camera.



Full HD Resolution 1920 x 1080

Shutter type: Rolling shutter

Sensor size: 1/2.5"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Interlaced Modes: 50i 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

SDI output: 1x HD-SDI output

Microphone: mono mic

Lens: 120° - 40° F/1,5-2,8

Size: Ø 60mm x 85mm

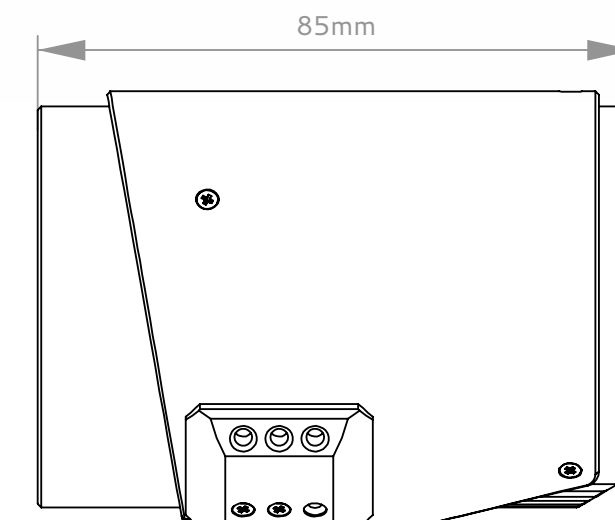
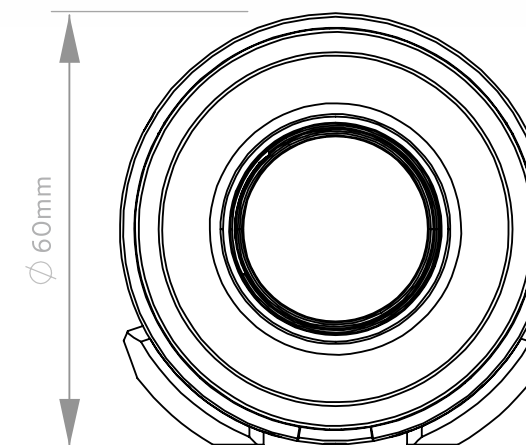
Weight: 267g



reddot winner 2022



reddot winner 2022
innovative product



AtomOne 4K mini 7

The Smallest UHD camera with Ultra wide angle.



Shutter type: Rolling shutter

Sensor size: 1/2.5"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60

Interlaced Modes: 50i 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

Genlock input

SDI output: 2x HD-SDI output

SDI 1 and SDI 2 can be downscaled to 3G/HD

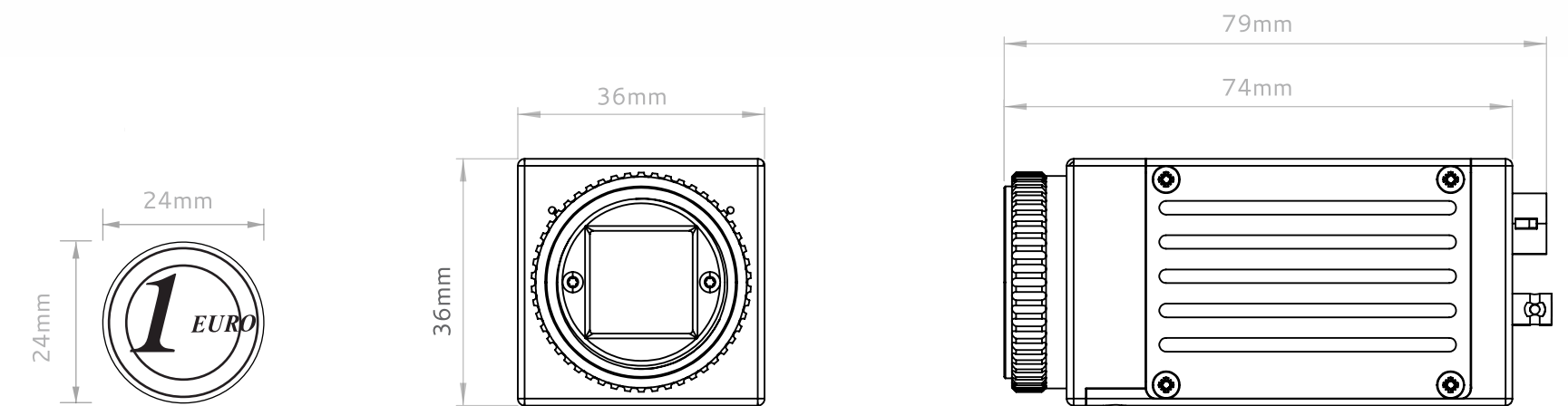
Microphone: stereo mic

Lens: Wide angle 85° @3.4mm lens (included)

Mount: S-Mount or C-Mount (not included)

Size: 36mm x 36mm x 74mm

Weight: 122g



AtomOne 4K mini 11

The Smallest UHD 2/3" camera with B4 lens compatible.



Shutter type: Rolling shutter

Sensor size: 2/3"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60

Interlaced Modes: 50i 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

Genlock input

SDI output: 2x HD-SDI output

One SDI can be downscaled to 3G/HD

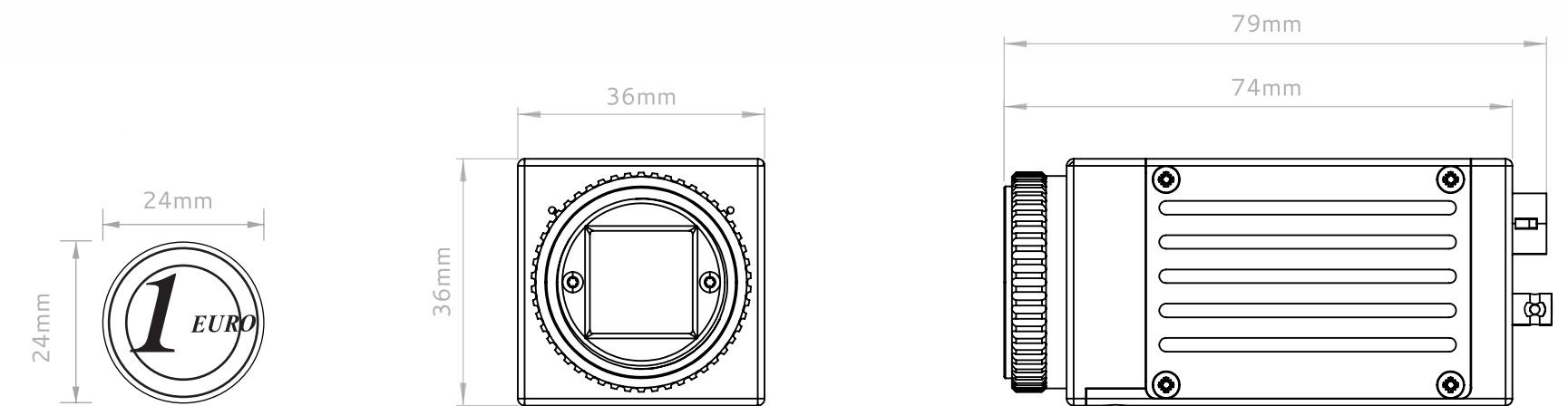
Microphone: stereo mic

Lens: Wide angle 76° @6mm lens (not included)

Mount: C-Mount

Size: 36mm x 36mm x 74mm

Weight: 123g



AtomOne 4K mini 16

The Smallest UHD 1" Global shutter with High Dynamic Range (HDR).



4096 X 2160 (4K Resolution)

Shutter type: Global shutter

Sensor size: 1"

Progressive Framerates: 23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60

Interlaced Modes: 50i 59.94i, 60i

HDR: HLG, PQ and SLOG3

Color: multi matrix support

Control: RS 485

Genlock input

SDI output: 2x HD-SDI output

One SDI can be downscaled to 3G/HD

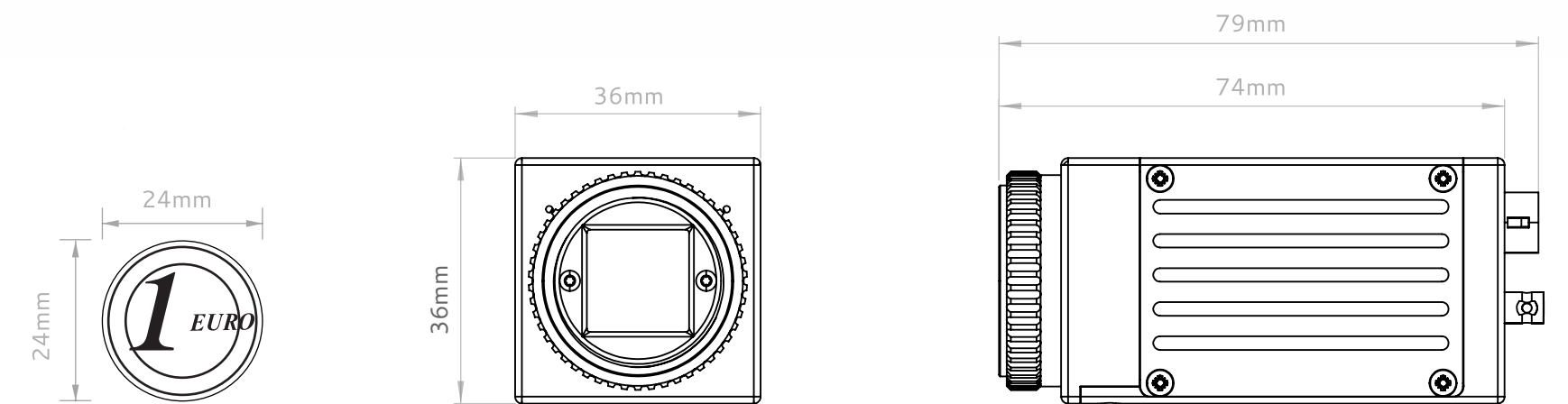
Microphone: stereo mic

Lens: Wide angle 112° @4,7mm lens (not included)

Mount: C-Mount

Size: 36mm x 36mm x 74mm

Weight: 123g





The really neat thing is, it's a 4K 60FPS HDR camera with dual outputs and genlock. It's stunning that a 4K global imager can fit in a box this small.

— Golf US Open, 2019



The AtomOne Family Overview

Unique models designed to fit your professional workflow.

	AtomOne mini	AtomOne mini AIR	AtomOne mini Waterproof	AtomOne	AtomOne SSM-500 C-Mount	AtomOne SSM 500 B4
SHUTTER TYPE	Rolling shutter	Rolling shutter	Rolling shutter	Global shutter	Global shutter	Global shutter
SENSOR SIZE	1/2.5"	1/2.5"	1/2.5"	1/1.23"	2/3"	2/3"
FRAME RATE	23 – 60 fps	23 – 60 fps	23 – 60 fps	23 – 60 fps	50 – 500 fps	50 – 500 fps
PROGRESSIVE FRAMERATES	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60
INTERLACED MODES	50i, 59.94i, 60i	50i, 59.94i, 60i	50i, 59.94i, 60i	50i, 59.94i, 60i	50i, 59.94i, 60i	50i, 59.94i, 60i
HDR	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3
COLOR	multi matrix support	multi matrix support	multi matrix support	multi matrix support	multi matrix support	multi matrix support
CONTROL	RS 485	RS 485	RS 485	RS 485	RS 485	RS 485
CAMERA MODE	–	–	–	–	SSM mode (4x60p) or Trigger mode	SSM mode (4x60p) or Trigger mode
SDI OUTPUT	1x HD–SDI output	1x HD–SDI output	1x HD–SDI output	2x HD–SDI output	4x HD–SDI output	4x HD–SDI output
GENLOCK INPUT	–	–	–	YES	YES	YES
MOUNT	S Mount	S Mount	S Mount	C Mount	C Mount	B4 Mount
LENS	85° @3.4mm – lens included	85° @3.4mm – lens included	85° @3.4mm – lens included	Wide angle 95° @5mm lens (not included)	Wide angle 112° @3.7mm lens (not included)	
MICROPHONE	Mono Mic	Mono Mic	Mono Mic	–	–	–
SIZE	30mm x 30mm x 30mm	30mm x 30mm x 18mm	32mm x 32mm x 51mm	32mm x 32mm x 72mm	60mm x 60mm x 189mm	92mm x 80mm x 244mm
WEIGHT	45g	25g	115g	100g	900g	1700g

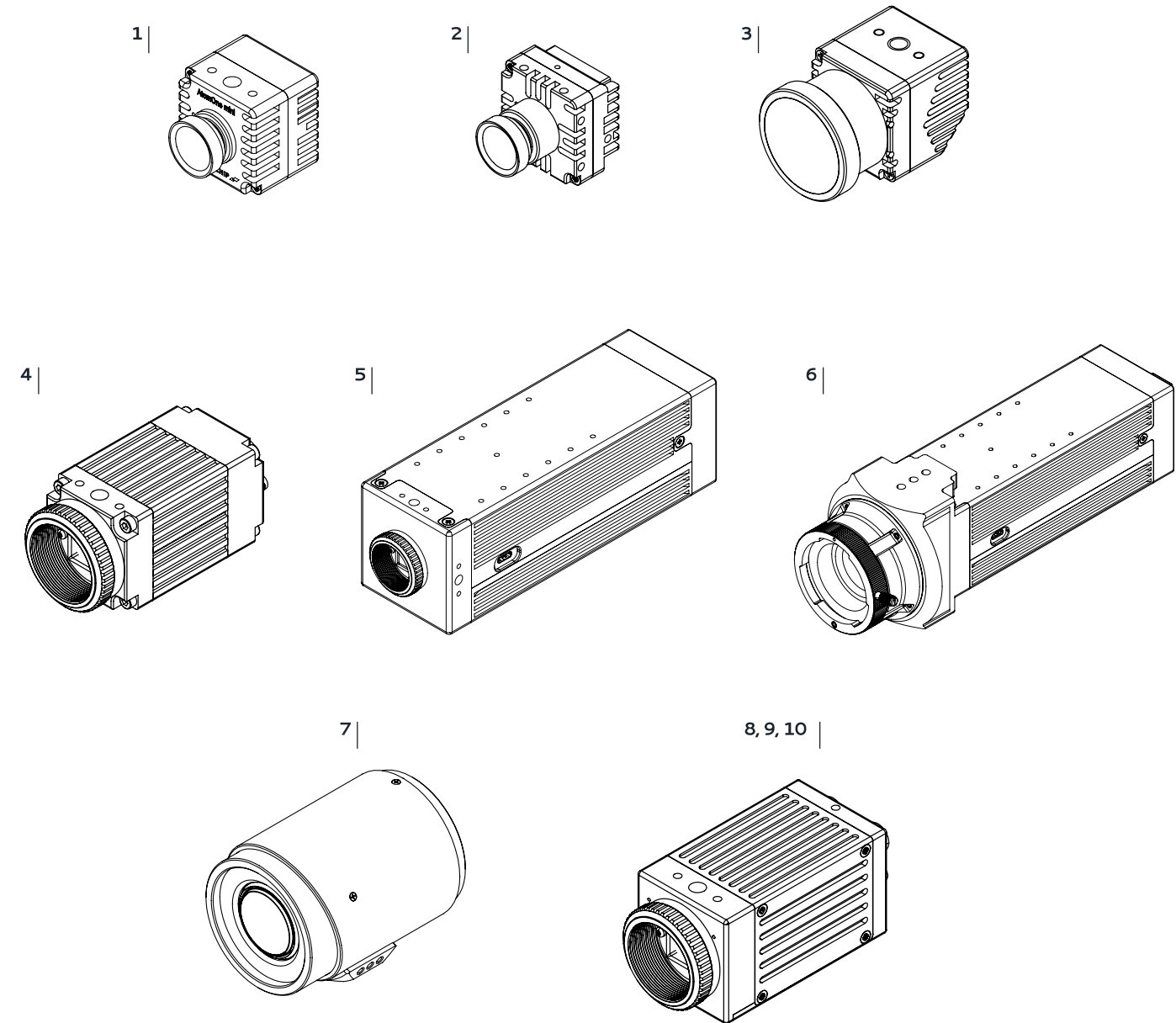
	AtomOne mini Zoom	AtomOne 4K mini 7	AtomOne 4K mini 11	AtomOne 4K mini 16
SHUTTER TYPE	Rolling shutter	Rolling shutter	Rolling shutter	Global shutter
SENSOR SIZE	1/2.5"	1/2.5"	2/3"	1"
FRAME RATE	–	–	–	–
PROGRESSIVE FRAMERATES	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60	23.98, 24, 25, 29.97, 30, 47.96, 48, 50, 59.94, 60
INTERLACED MODES	50i 59.94i, 60i	50i 59.94i, 60i	50i 59.94i, 60i	50i 59.94i, 60i
HDR	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3	HLG, PQ and SLOG3
COLOR	multi matrix support	multi matrix support	multi matrix support	multi matrix support
CONTROL	RS 485	RS 485	RS 485	RS 485
CAMERA MODE	–	–	–	–
SDI OUTPUT	1x HD–SDI output	2x HD–SDI output (SDI 1 and SDI 2 can be downscaled to 3G/HD)	2x HD–SDI output (SDI 1 and SDI 2 can be down–scaled to 3G/HD)	2x HD–SDI output (SDI 1 and SDI 2 can be downscaled to 3G/ HD)
GENLOCK INPUT	–	YES	YES	YES
MOUNT	–	S–Mount or C–Mount (not included)	C–Mount	C Mount
LENS	120° – 40° / F1,5–2,8	85° @3.4mm – lens included	Wide angle 76° @6mm lens (not included)	Wide angle 112° @4,7mm lens (not included)
MICROPHONE	Mono Mic	Stereo mic	Stereo mic	Stereo mic
SIZE	60mm x 60mm x 80mm	36mm x 36mm x 74mm	36mm x 36mm x 74mm	36mm x 36mm x 74mm
WEIGHT	267g	122g	123g	123g



1. AtomOne mini
2. AtomOne mini AIR
3. AtomOne mini Waterproof
4. AtomOne
5. AtomOne SSM500 C-Mount
6. AtomOne SSM500 B4
7. AtomOne mini Zoom



8. AtomOne 4K mini 7
9. AtomOne 4K mini 11
10. AtomOne 4K mini 16



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Made in Germany

