



AtomOne

SSM 500

Foreword by CEO
Peter Schaper

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Built for action. Small,
strong, versatile.

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Super-slow-motion at
the heart of the action

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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 robust and hardy, you can be sure they'll survive even the most challenging of environments.





Slow-motion is an incredible storytelling device, and the key to good sports broadcast is about telling a story; capturing emotion, conflict, or a moment where everything hangs in the balance. It's about creating suspense and enhancing the magic of movement - making the energy, effort and excitement visible on the micro level. The SSM500 allows us to do that.

— Dream Chip Customer



Super-slow-motion at the heart of the action.

Tiny, adaptable and robust; a super-slow-motion camera that fits seamlessly into your existing workflow.

Every muscle, every grimace, every detail; super-slow-motion brings so much more to your shot – emotion, energy, excitement. But what if you could harness the power of super-slow-motion and get right into the heart of the action? The exceptionally small size of the AtomOne SSM500 (just 190mm x 60mm x 60mm) combined with its 500fps framerate capability provide unrivalled opportunity to position cameras almost anywhere, and capture shots that tell a story. The SSM500 gives you the opportunity to break down creative walls, without breaking your production budget.

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

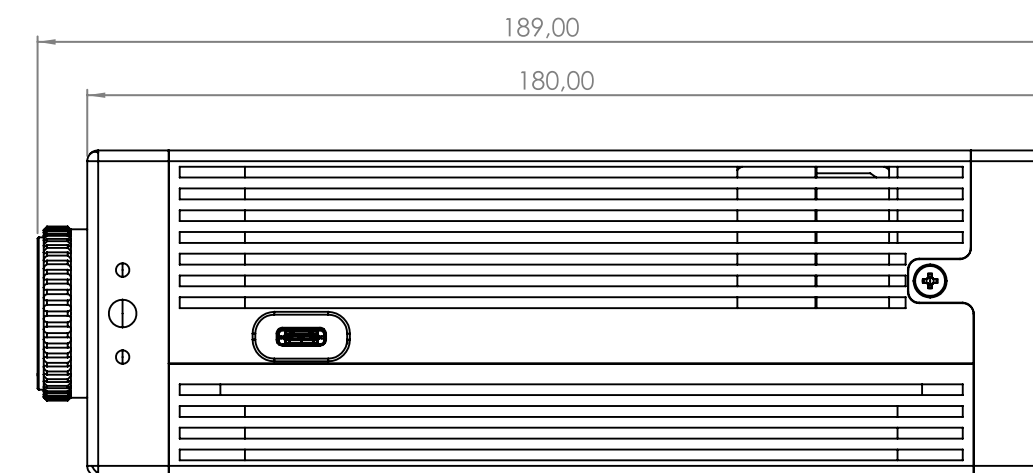
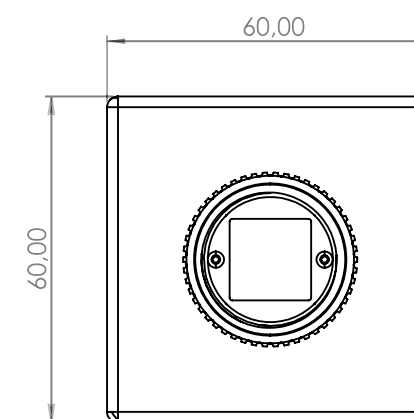
Genlock input

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

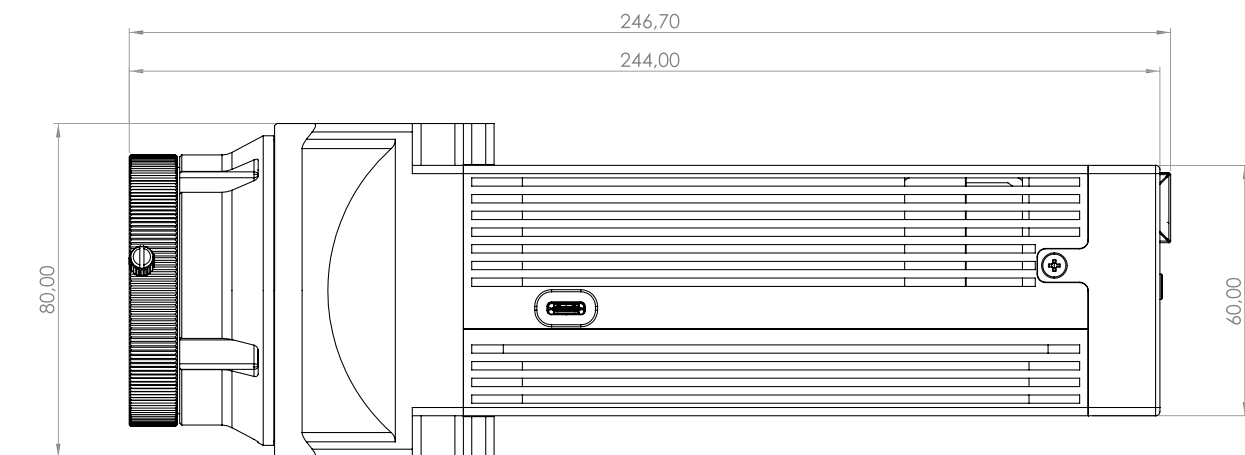
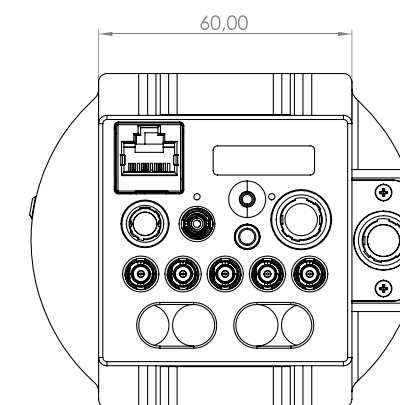
SDI output: 4x HD-SDI output

Genlock input

Mount: B4 Mount

Size: 92mm x 80mm x 244mm

Weight: 1700g





The workflow that works for you.

The SSM500 is designed not just to fit in the palm of your hand, but to fit in with your existing workflows too. It captures High Definition images, integrating your existing lens equipment and operating with all major Broadcast Servers - as well as providing five HDSI outputs and a Genlock to synchronise video with other sources in your setup - the SSM500 gives you a revolutionary tool without requiring a revolution in your workflow.

It also grants flexibility with two unique modes of operation. In Trigger mode, the SSM500 gives 60 seconds of 500fps footage (that's ten minutes of playout), stored on the camera's SSD, and allowing for live output and replay output to occur in conjunction. Alternatively, SSM allows for super-slow-motion capture through 2, 3 or 4 phase connection to any server, facilitating capture at up to 240fps.

SSM500 – Workflow

- Sensor:** 2/3” CMOS

Dynamic: 300 fps 12 bit - 500 fps 10bit

Frame rate: up to 500 fps

Shutter type: Global (1 /25-1/10000s)

Video output: SSM mode or Trigger mode

Color control unit: multi matrix support
- Recording time:** @500fps 60 seconds

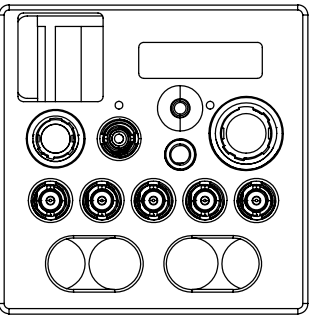
SDI Output: 5 x 3G SDI

Sensitivity: ISO 640

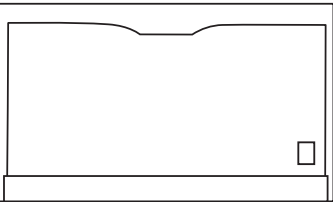
HDR Mode: HLG,PQ

Mount: C-Mount, optional B4 & MFT Moun

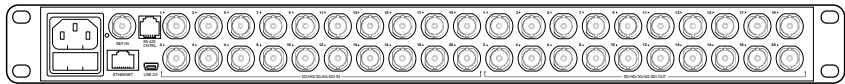
1 SSM Mode



Up to 4x 3G*
Up to 4x 60fps

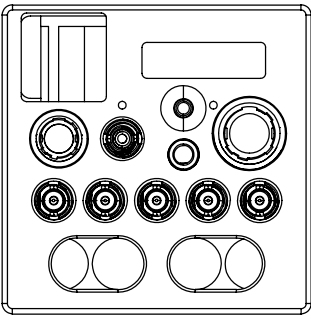


3G SDI



Video Router

2 Trigger Mode



Live – 3G SDI
Up to 500 fps
REPLAY – 3G SDI
Internal memory 60
seconds of recording
in 1080i50



*2x, 3x, 4x, SSM Mode available depending on the configuration.



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 Family Overview

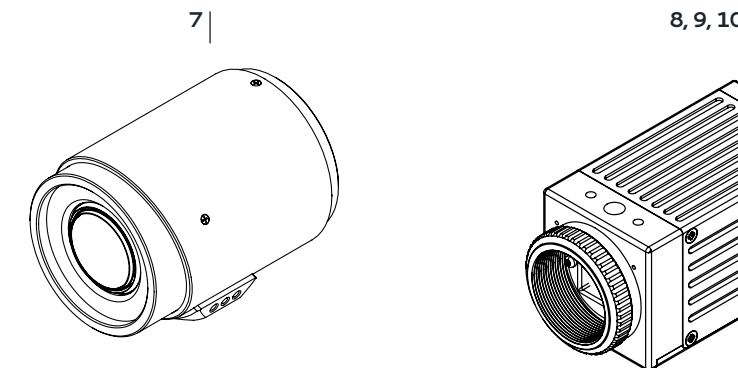
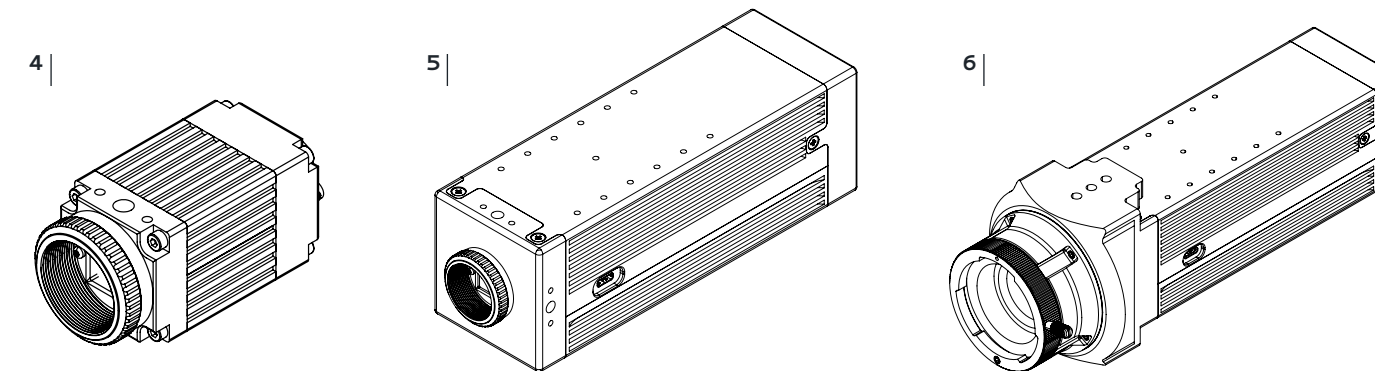
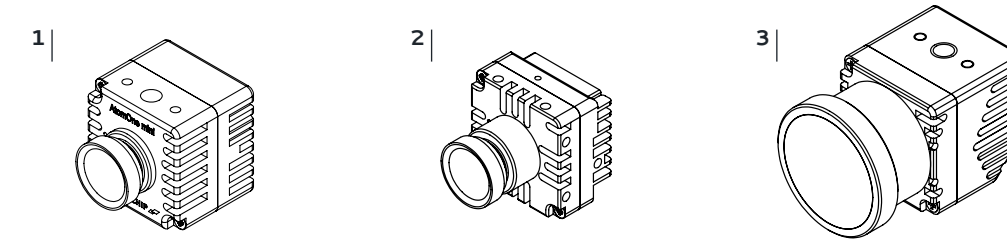
Unique models designed to fit your professional workflow.



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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