



**PROTON**  
CAMERA INNOVATIONS



PROTON CAM real size

**Size matters!**

Our Cam is only 28mm

**We're not just imagining  
the future of broadcast  
cameras...**

**We're building it!**

v.01/26

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FUTURE. MINI. CAMERA.

# Where **INNOVATION** Meets Expertise

PROTON – a new entrant in the field of miniature cameras – leverages its team’s extensive experience in camera miniaturisation to deliver the industry’s smallest and lightest broadcast-standard camera currently on the market.

Incorporating its own chip technology with a larger sensor than competitor models, the PROTON delivers wider shots, higher dynamic range, improved low-light performance and lower energy draw.

With the addition of stereo audio and tally light, the PROTON is perfect for sports broadcast, live events, drone attachment, PoV and body-mounting or any number of other creative and immersive cinematography applications where versatility, robustness and space are key determinants of success.

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This immersive quality is not limited to sport alone. Live concerts, events, reality shows, TV and film will all benefit from the compact and discrete nature of the PROTON, allowing cinematographers and DoPs to not only capture dynamic, high-quality footage in any environment, but granting a valuable tool for those seeking innovative ways to tell their stories and capture compelling visuals.

Explore our range  
of innovative products:

## THE LINEUP

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# Discover PROTON CAM smaller than 2 dice!

The PROTON CAM is the world's smallest broadcast camera.

Measuring 28 x 28mm and weighing 24 grams, it features advanced 12-bit sensor technology, low power consumption, wide-angle lenses, and stereo audio, making it perfect for sports, live events, and creative cinematography.

Its compact design, versatility, and high-quality performance have made it a popular choice for a range of applications, including drone integration and immersive sports coverage.

**NEW** Also Available in (see page 24):

**□ Connector Version**

**□ C-/CS- Lens Mount**



## SPECIFICATIONS

- **Smallest Broadcast camera**  
on the market (28x28x23mm), 24 gr
- **Up to 120° ultra wide angle**
- **High 12 bit dynamic 1080p**  
2-stops more on mini cameras
- **HDR compliant**  
HLG, PQ and S-log3
- **High sensitivity**  
Low noise, less light required
- **Lowest voltage & Power**  
4.5V-25V — 2.5W
- **Connection:**  
1.8m coax cable 3G SDI video - BNC plug  
1.8m power cable and control (RS485)  
- Hirose connector
- **Stereo Microphone**
- **Tally light integrated**

# Go wild with the weatherproof **PROTON RAIN!**

The PROTON RAIN is a rugged mini-camera built for outdoor production and sports.

Slightly larger than the PROTON CAM, this 30 x 30mm IP67-rated camera is weatherproof and impact-resistant, ideal for harsh conditions without sacrificing image quality.

Featuring replaceable wide-angle lenses and user-friendly operation, the PROTON RAIN provides versatile, durable performance, enhancing creative possibilities for outdoor and sports videography.



## SPECIFICATIONS

- **Smallest IP67 Broadcast camera**  
on the market (30x30x26mm), 38 gr
- **Up to 120° wide angle**
- **High 12 bit dynamic 1080p**  
2-stops more on mini cameras
- **HDR compliant**  
HLG, PQ and S-log3
- **High sensitivity**  
Low noise, less light required
- **Lowest voltage & Power**  
4.5V-25V — 2.5W
- **Connection:**  
1.8m coax cable 3G SDI video - BNC plug  
1.8m power cable and control (RS485)  
- Hirose connector
- **Tally light integrated**

# Unlock Possibilities with **PROTON FLEX!**

The PROTON FLEX is a flexible mini-camera engineered to optimize performance.

Measuring 28 x 28mm, it features a separated sensor and video processing chip along with its power supply, enhancing weight distribution and operational versatility.

Its capability to integrate into difficult and inaccessible locations opens up limitless possibilities, making it perfect for creative and innovative filming in challenging environments



## SPECIFICATIONS

- **Flexible Broadcast camera**  
Head: 28x28x20mm +  
ECU: 28x38x11.5mm, 37 gr
- **Up to 120° ultra wide angle**
- **High 12 bit dynamic 1080p**  
2-stops more on mini cameras
- **HDR compliant**  
HLG, PQ and S-log3
- **High sensitivity**  
Low noise, less light required
- **Lowest voltage & Power**  
4.5V-25V — 2.5W  
(Head: 0.5W + ECU: 2W)
- **Connection:**  
1.8m coax cable 3G SDI video - BNC plug  
1.8m power cable and control (RS485)  
- Hirose connector
- **Stereo Microphone**
- **Tally light integrated**

# Get closer to the **ACTION!**

The PROTON ZOOM brings powerful zoom capabilities to the world of ultra-compact POV cameras.

Built on the proven PROTON CAM platform, it delivers exceptional image quality while offering the flexibility to get closer to the action without compromising on size or performance.

Perfect for sports, live broadcasts, and creative productions, PROTON ZOOM ensures every detail is within reach.

**NEW** Also Available in (see page 26):

**□ Connector Version**



## SPECIFICATIONS

- **Smallest Broadcast camera with zoom** on the market (50x50x67mm), 234 gr
- **From 55° to 115° ultra wide angle** 2.3x zoom
- **High 12 bit dynamic 1080p** 2-stops more on mini cameras
- **HDR compliant** HLG, PQ and S-log3
- **High sensitivity** Low noise, less light required
- **Lowest voltage & Power** 4.5V-25V — 3.5W
- **Connection:** 1.8m coax cable 3G SDI video - BNC plug 1.8m power cable and control (RS485) - Hirose connector
- **Microphone input**
- **Tally light integrated**

# Capture Every Moment in High-Speed Precision!

Experience high-speed capture like never before with the PROTON HFR. Designed for demanding productions, this ultra-compact slow-motion camera delivers exceptional image quality in a tiny form factor.

With multiple speed options — 2x (50/60 fps), 3x (100/120 fps), and 4x (200/240 fps) — the PROTON HFR adapts to every production need, from smooth replays to dramatic cinematic shots.

Whether for sports, live events, or creative storytelling, the PROTON HFR ensures every moment is captured with precision and fluidity.

Small size, big impact.



## SPECIFICATIONS

- ▣ **Smallest HFR Broadcast camera** on the market (240 FPS) (36x36x90mm), 150 gr CS/C-Mount lens, 2/3" global sensor
- ▣ **High 12 bit dynamic 1080p** 2-stops more on mini cameras
- ▣ **HDR compliant** HLG, PQ and S-log3
- ▣ **High sensitivity** Low noise, less light required
- ▣ **Lowest voltage & Power** 12V-25V — 15W
- ▣ **Connection:** 4x3G SDI - HD-BNC plug (optional 12G output)
- ▣ **Optional detachable head**
- ▣ **2 x Microphone inputs**

# 4K excellence in a **COMPACT** **DESIGN**

Discover the PROTON 4K – the smallest 4K broadcast camera on the market. Delivering ultra-wide angles, high dynamic range, and unparalleled sensitivity – all in a lightweight, compact design built for professional productions.

Engineered for the most demanding environments, the PROTON 4K combines true broadcast quality with a form factor small enough to fit anywhere: on helmets, rigs, drones, or tight studio setups.

As workflows are moving more and more to 4K production, this camera is the perfect tool to deliver new perspectives and creative angles, bringing broadcast and live production closer to the action than ever before.

With exceptional low-light performance, precise color reproduction, and seamless integration into standard broadcast workflows, the PROTON 4K opens new creative possibilities without compromise.

**NEW** Also Available in (see page 24):

**C-/CS- Lens Mount**



## SPECIFICATIONS

- ▣ **Smallest 4K Broadcast camera** on the market (28x28x34.5mm), 31 gr (body only)
- ▣ **Up to 120° ultra wide angle**
- ▣ **High 12 bit dynamic 4Kp60** (Downscale to 1080p possible)
- ▣ **HDR compliant** HLG, PQ and S-log3
- ▣ **High sensitivity** Low noise, less light required
- ▣ **Lowest voltage & Power** 12V-25V — 6W
- ▣ **Connection:** 1.8m coax cable 12G SDI video - BNC plug  
1.8m power cable and control (RS485)  
- Hirose connector
- ▣ **Stereo Microphone**
- ▣ **Tally light integrated**

# Unleash Ultimate **FLEXIBILITY** in 4K!

Designed for the most demanding productions, the PROTON 4K Flex delivers outstanding 4K image quality in an ultra-compact, versatile form.

With flexible mounting options and seamless integration into professional workflows, it's the perfect solution for capturing dynamic POV shots with precision and ease.

Experience 4K without limits – wherever your creativity takes you.



## SPECIFICATIONS

- **Flexible Broadcast camera**  
Head: 28x28x20mm +  
ECU: 28x38x25mm, 60 gr
- **Up to 120° ultra wide angle**
- **High 12 bit dynamic 4K**  
2-stops more on mini cameras
- **HDR compliant**  
HLG, PQ and S-log3
- **High sensitivity**  
Low noise, less light required
- **Lowest voltage & Power**  
12V-25V — 6W (Head: 1W + ECU: 5W)
- **Connection:**  
1.8m coax cable 12G SDI video - BNC plug  
1.8m power cable and control (RS485)  
- Hirose connector
- **Stereo Microphone**
- **Tally light integrated**

# Get closer to the **ACTION** in 4K!

The PROTON 4K ZOOM is designed for productions that demand both precision and flexibility in an ultra-compact form factor.

Combining true 4K resolution with advanced zoom control, it allows operators to frame the action with accuracy, even in the most constrained environments.

Based on the PROTON 4K architecture, it delivers exceptional image fidelity, low latency, and rock-solid performance.

From live sports and broadcast applications to immersive and creative setups, PROTON 4K ZOOM brings uncompromised 4K detail exactly where it matters.

**NEW** Also Available in (see page 26):

**□ Connector Version**



## SPECIFICATIONS

- **Smallest Broadcast camera with zoom** on the market (50x50x67mm), 234 gr
- **From 55° to 115° ultra wide angle** 2.3x zoom
- **High 12 bit dynamic 4Kp60** 2-stops more on mini cameras
- **HDR compliant** HLG, PQ and S-log3
- **High sensitivity** Low noise, less light required
- **Lowest voltage & Power** 12V-25V — 7W
- **Connection:** 1.8m coax cable 12G SDI video - BNC plug 1.8m power cable and control (RS485) - Hirose connector
- **Microphone input**
- **Tally light integrated**

# Control your **PROTON** cameras via Ethernet with a compact and reliable interface

The PIO-E is a compact IP remote interface designed specifically for PROTON cameras. With a single Ethernet cable, you get power (PoE), camera control, and bi-directional communication — making it the perfect tool for modern broadcast workflows.

PIO-E connects seamlessly to our proprietary PROTON control software, while also working with industry-standard RCP solutions such as CyanView and Skaarhoj, ensuring full integration into any regular broadcast setup.

Whether you're in a live OB van, a sports venue, or a multicam studio, the PIO-E simplifies your setup and extends your control possibilities — without compromise.



## SPECIFICATIONS

- **Size** 22x27x60mm (housing), 22x27x66mm (with Hirose), 60 gr
- **Ethernet connector**  
100Mbit POE support IEEE802.3af
- **HR10A-7R-6S(73)**  
female for camera
- **12V 1A** Power supply
- **USB C connector for Service**  
Firmware, optional configuration
- **RGB Status LED**
- **Bind / Reset button**  
For Bluetooth or recovery
- **4x M2.5mm mountpoints**  
Compatible with PROTON ¼ Tripod mount plate
- **Configuration**  
Via USB, Ethernet and Bluetooth

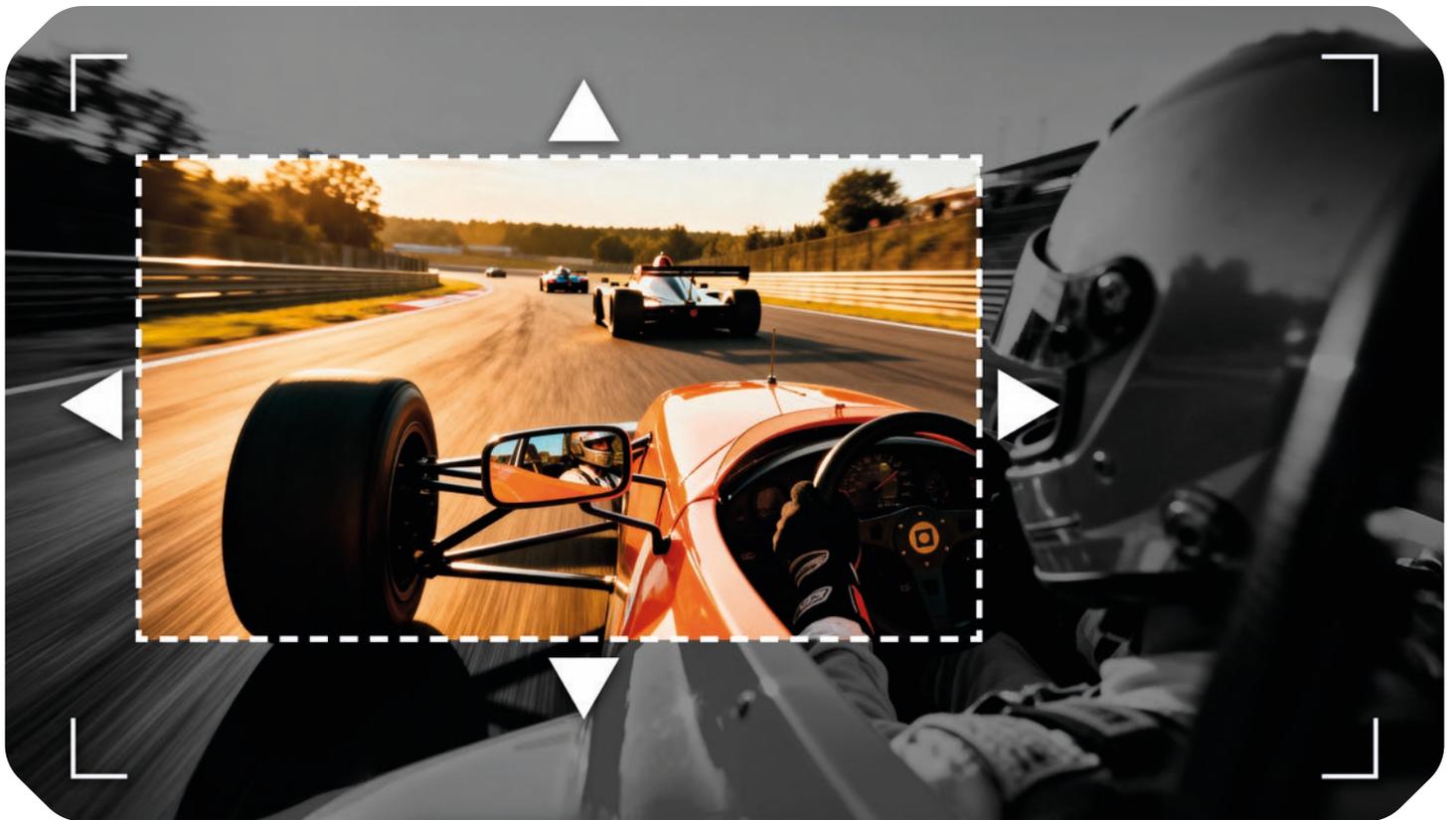
# Adjust your **PROTON** cameras

Framing live,  
virtual pan & tilt  
functions!

**NEW!**

PROTON's Crop & Pan/Tilt function allows virtual pan, tilt, and framing adjustments from a single camera source.

Ideal for live production workflows, it offers enhanced creative control and operational flexibility without compromising image quality or performance (only on 1080p60 models).



# Lens mounts & Interfaces

## ▣ PROTON CAM

### Connector Version



Ref: PCI-CAM-CON

### C-/CS- Lens Mount



Ref: PCI-CAM-CS

Some of our cameras are also available in a connector version and/or with a C-mount / CS-mount

### Connector Version

### C-/CS- Lens Mount



Ref: PCI-CAM-CON-CS

## ▣ PROTON 4K

### C-/CS- Lens Mount



Ref: PCI-4K-CS

## More Interfaces

### PROTON ZOOM

#### Connector Version



Ref: PCI-ZOOM-CON

### PROTON 4K ZOOM

#### Connector Version

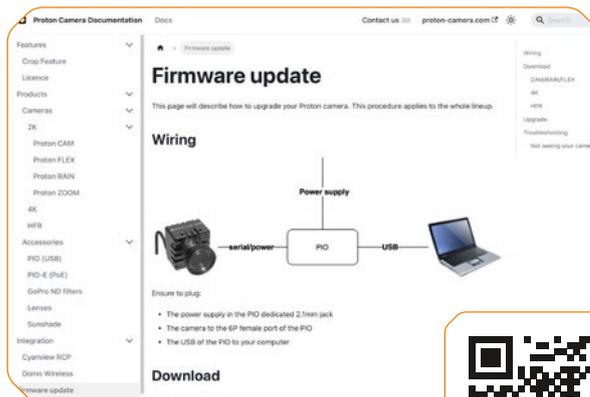


Ref: PCI-4K-ZOOM-CON

# Precision Deserves EXPERT SUPPORT!

To ensure optimal integration, operation, and long-term reliability of PROTON cameras, we recommend regularly visiting [doc.proton-camera.com](https://doc.proton-camera.com)

This support platform provides comprehensive technical documentation, step-by-step tutorials, instructional videos, and access to the latest firmware versions, ensuring your cameras are always up to date and performing at their best.



# Accessories

## □ **M12 Lenses**

Available angles : 124°(IP67), 110°,  
97°(IP67), 88°, 85°, 68°(IP67), 52°, 35°

## □ **Power supplies**

- PROTON power supply 12V 1A  
Ref: PCI-ACC-PSU.
- PROTON power supply 24V 1A  
for the HFR  
Ref: PCI-ACC-PSU-24-1.

## □ **PIO-E**

Connecting box for the PROTON  
CAMERA (not for HFR) with ethernet  
(PoE only). Ref: PCI-ACC-PIO-E.

## □ **PIO**

Connecting box for the PROTON  
CAMERA (HFR ok). Ref: PCI-ACC-PIO.

## □ **Cables**

- **Fanout**  
Power fan out cable for  
PROTON CAMERA  
Ref: PCI-ACC-FOUT.
- **HFR Power cable**  
Camera connection cable  
for the HFR.  
Ref: CBL-POWER-01-200.
- **Additional cable options**  
available on our website.



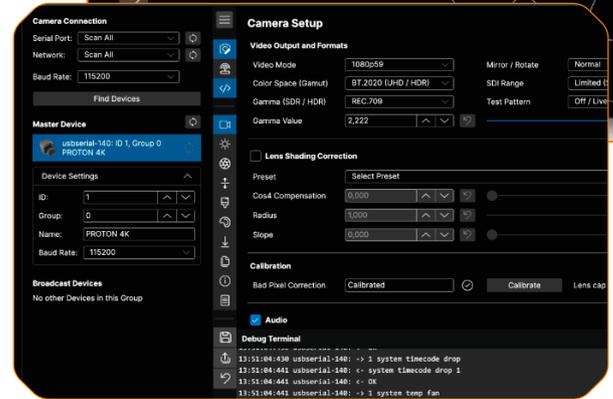
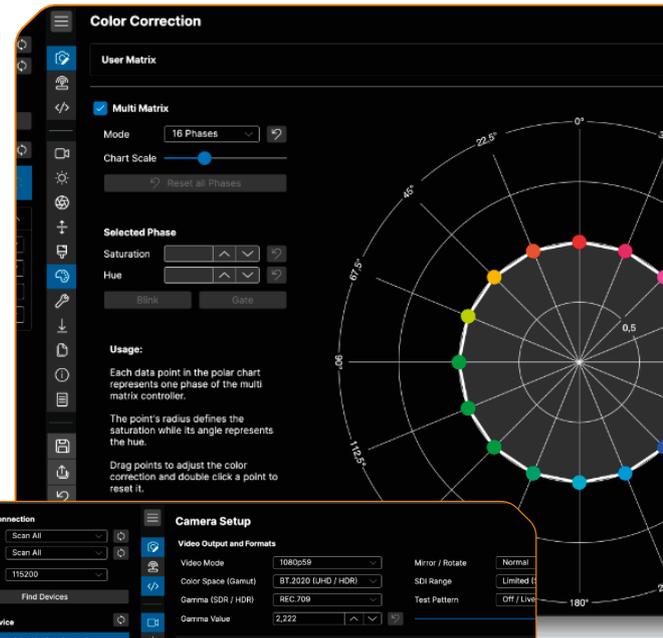
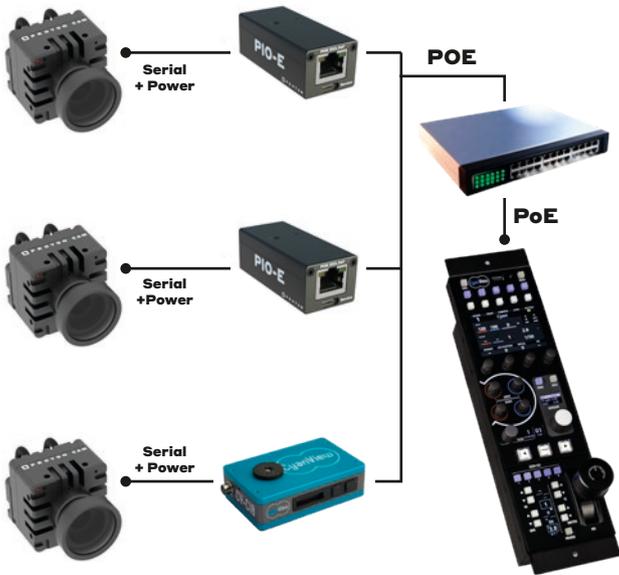
# Workflows

PROTON cameras can be operated using our free control software.

For advanced live production workflows, they also integrate with industry-standard third-party RCPs, including universal multi-brand solutions such as Cyanview.

A single RCP can manage large camera fleets, mixing brands and models within the same production.

## ▣ CyanView RCP



## ▣ PROTON GUI

The PROTON Camera GUI is a free control interface designed for configuration, monitoring, and maintenance of PROTON cameras.

Fully compatible with macOS and Windows, it provides reliable and efficient operation for professional broadcast environments.



**PROTON**  
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**MEET US AT**



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**PROTON-CAMERA.COM**

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All specifications are subject to change without notice.