



Multicamera.Systems

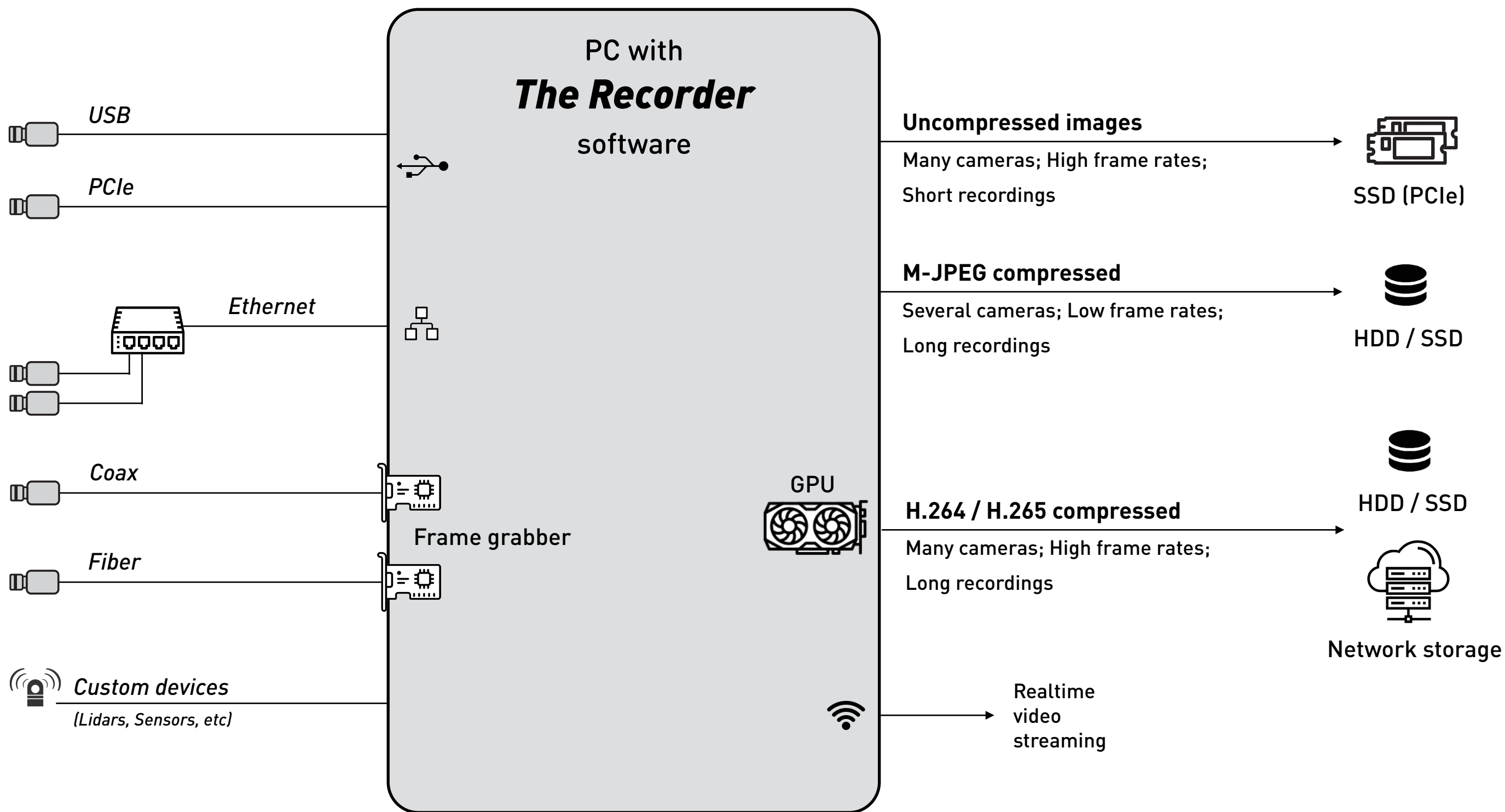
The Recorder

Video and Data

**Acquisition, Recording and Processing
Software**

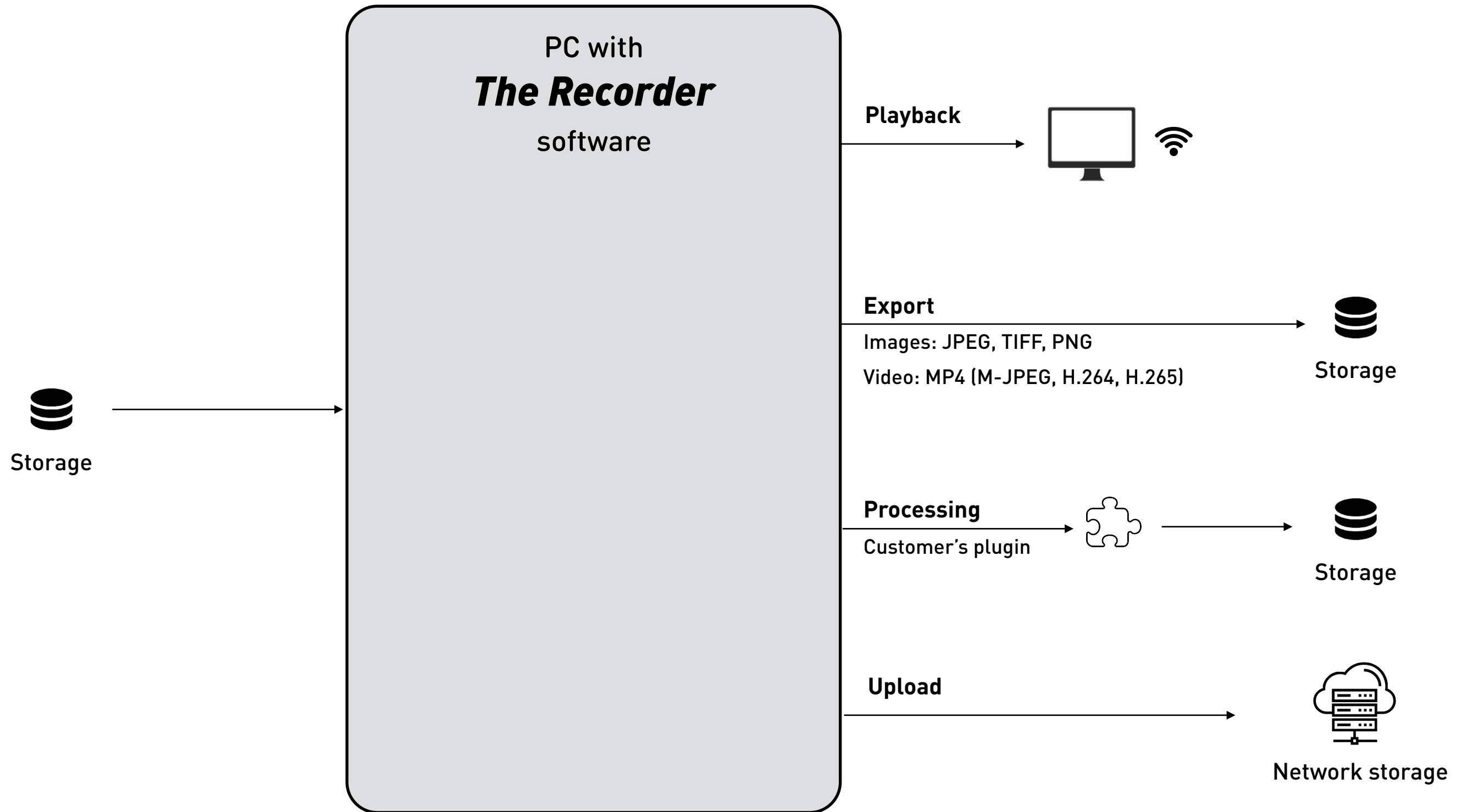
The software for all possible needs

(Data acquisition and recording)



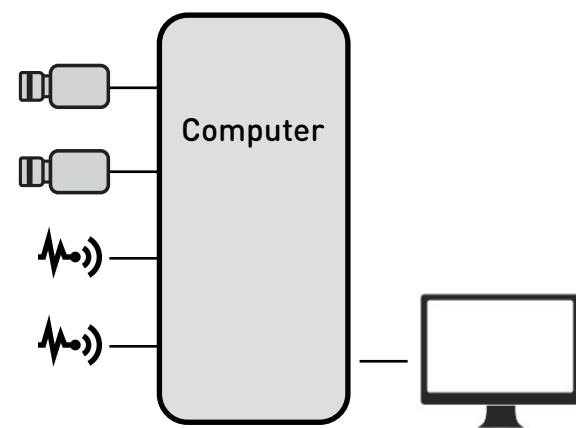
The software for all possible needs

(Recorded data playback, export and processing)



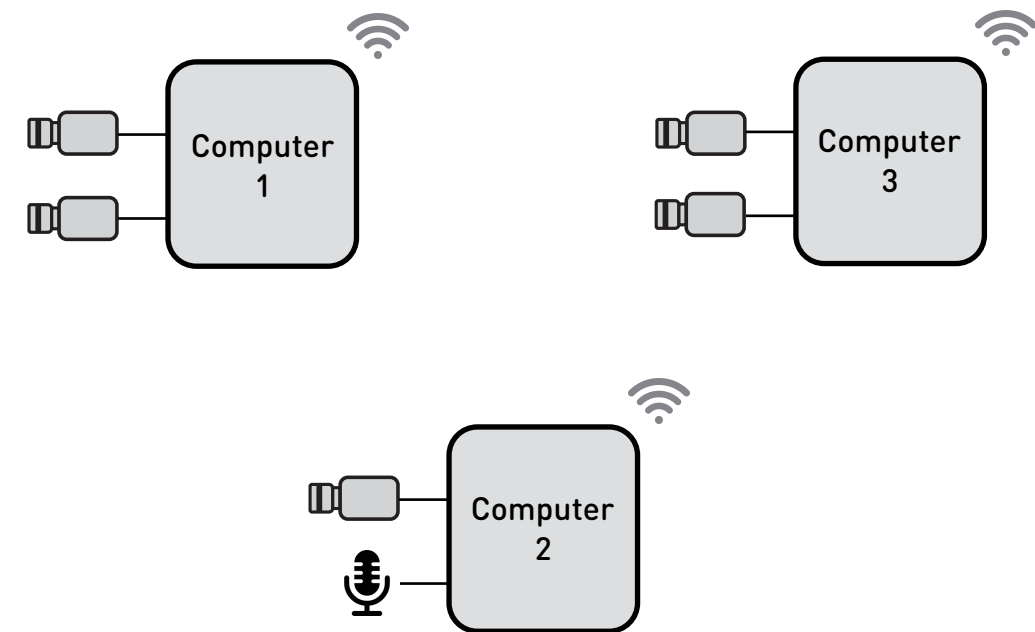
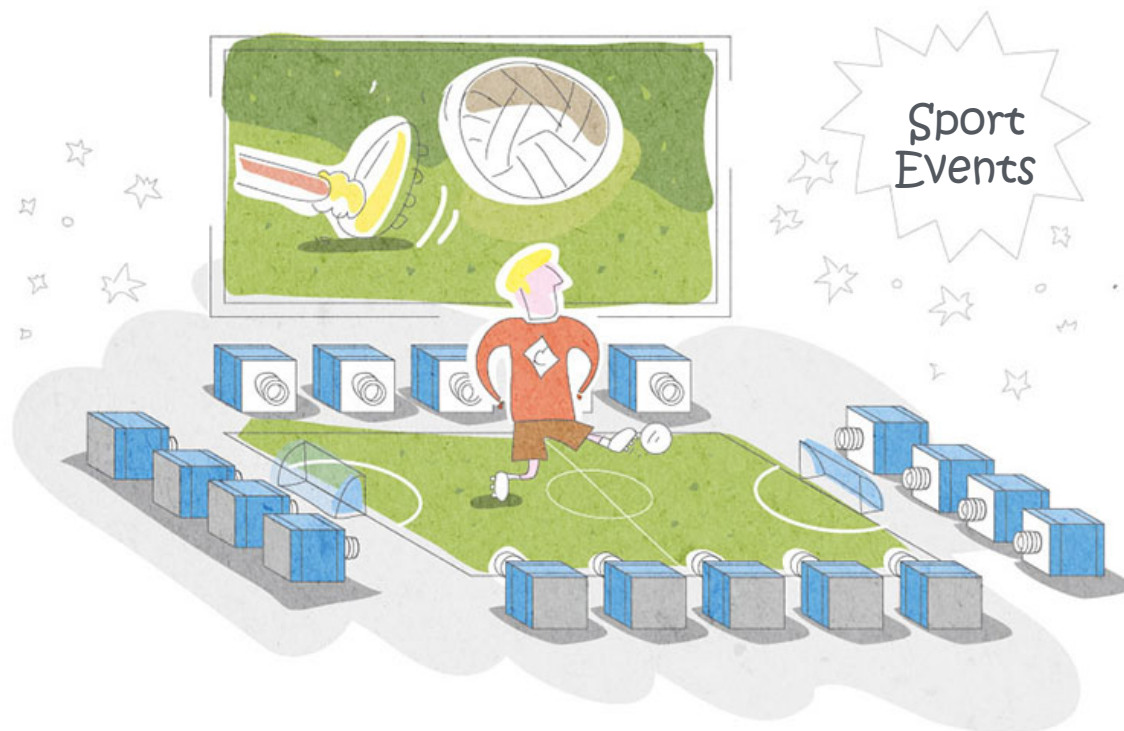
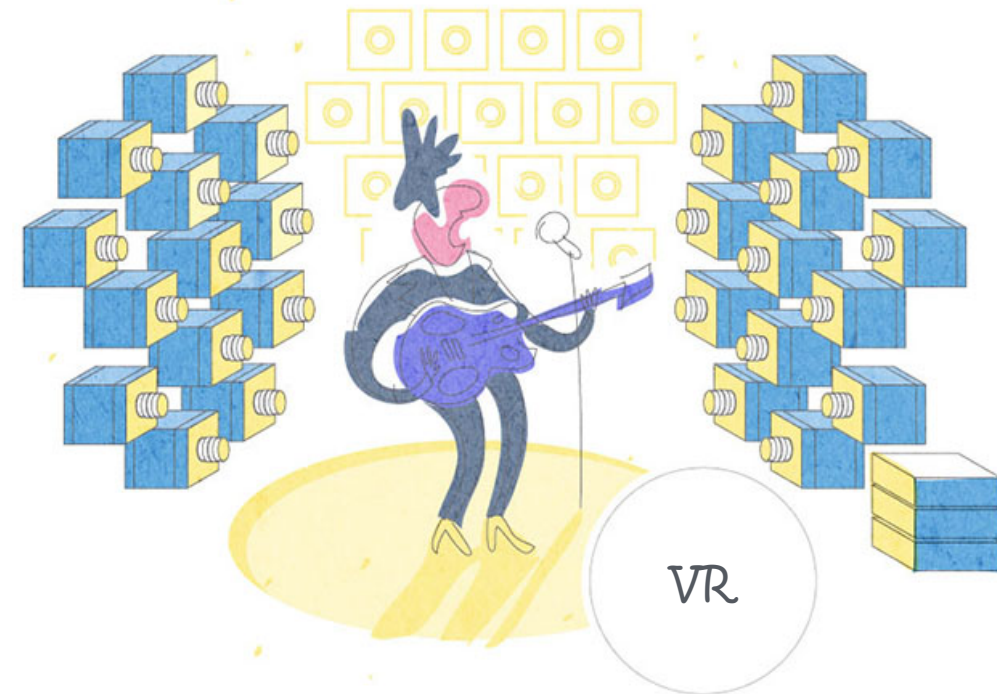
Recording systems with variety of configurations

Single computer system



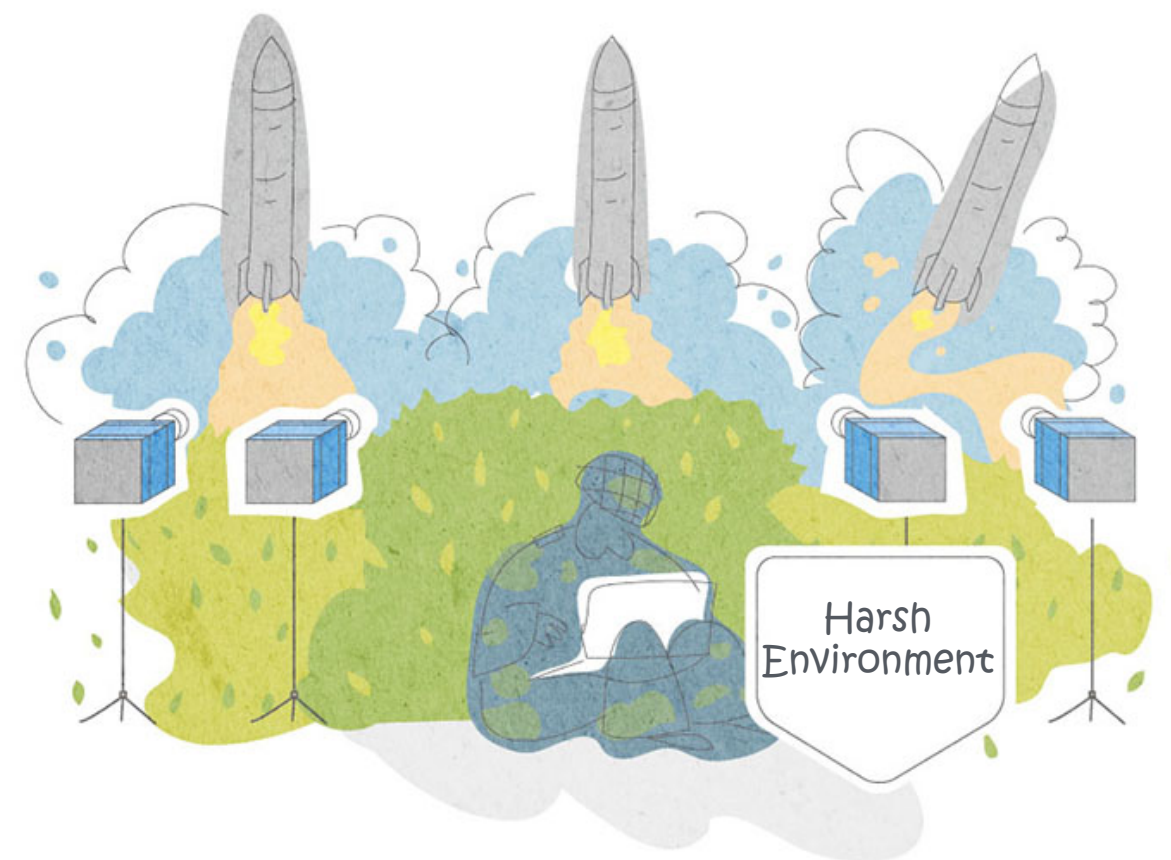
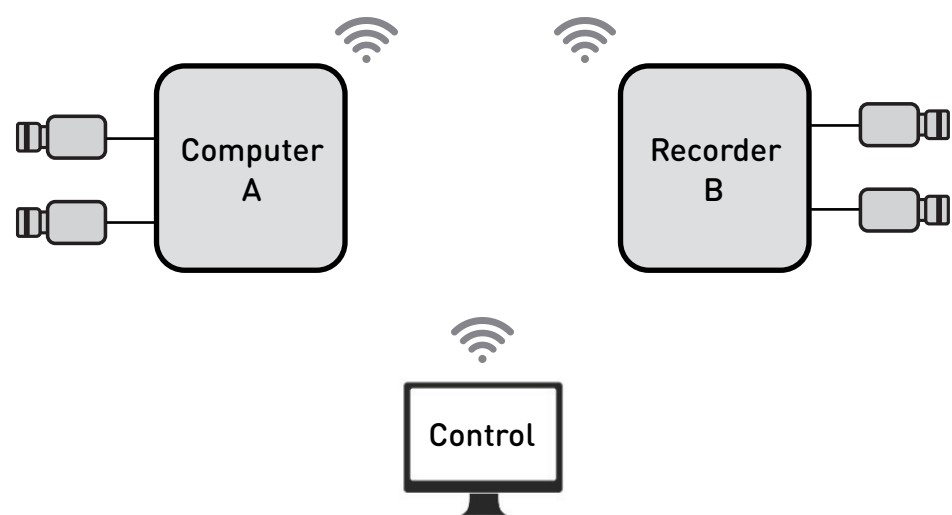
Recording systems for variety of application

Systems with multiple computers



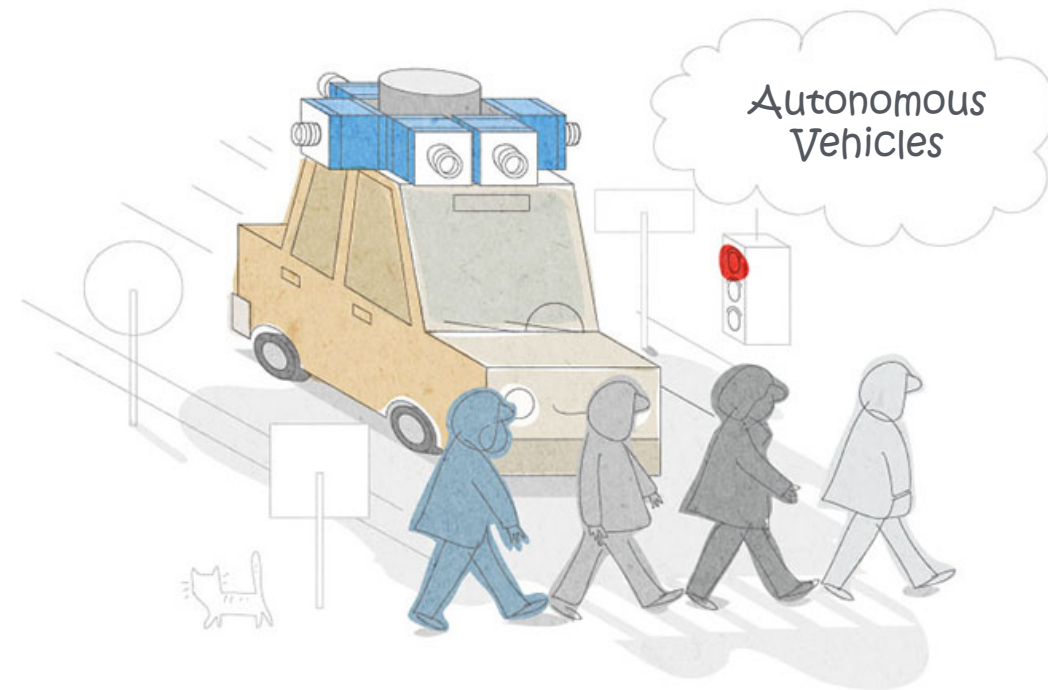
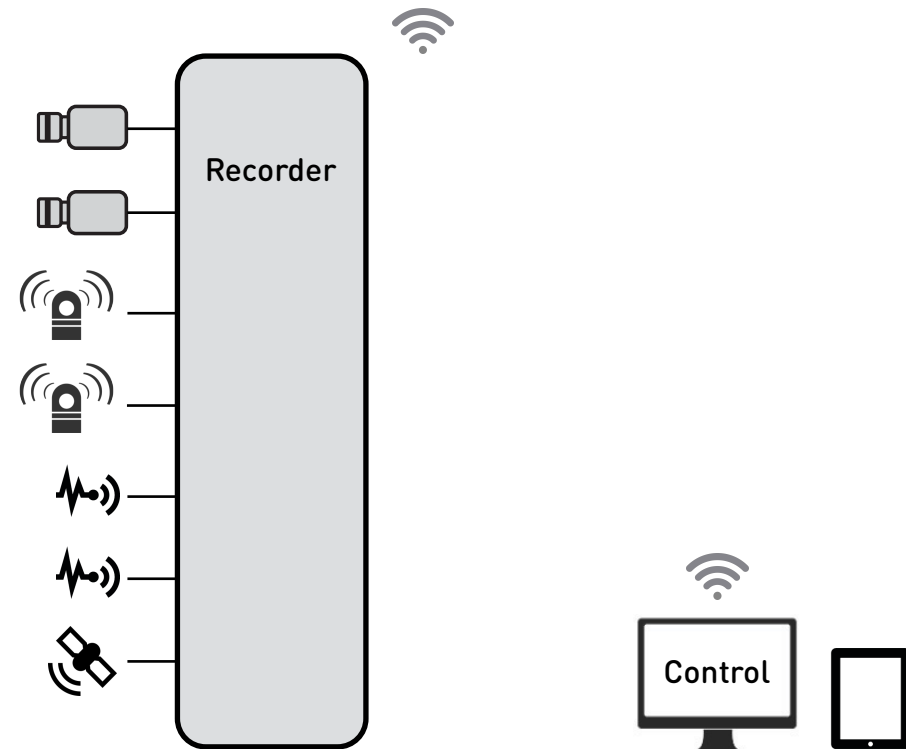
Recording systems for specific conditions

Redundant Recording Systems



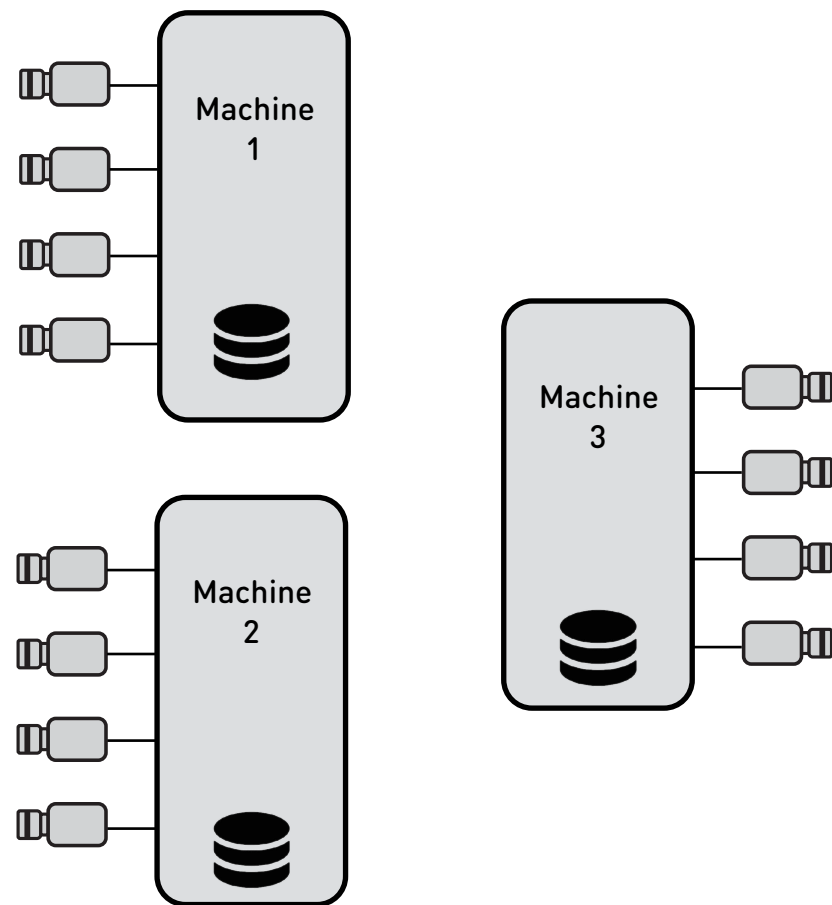
Recording systems with various equipment

Recording systems with various types of data sources

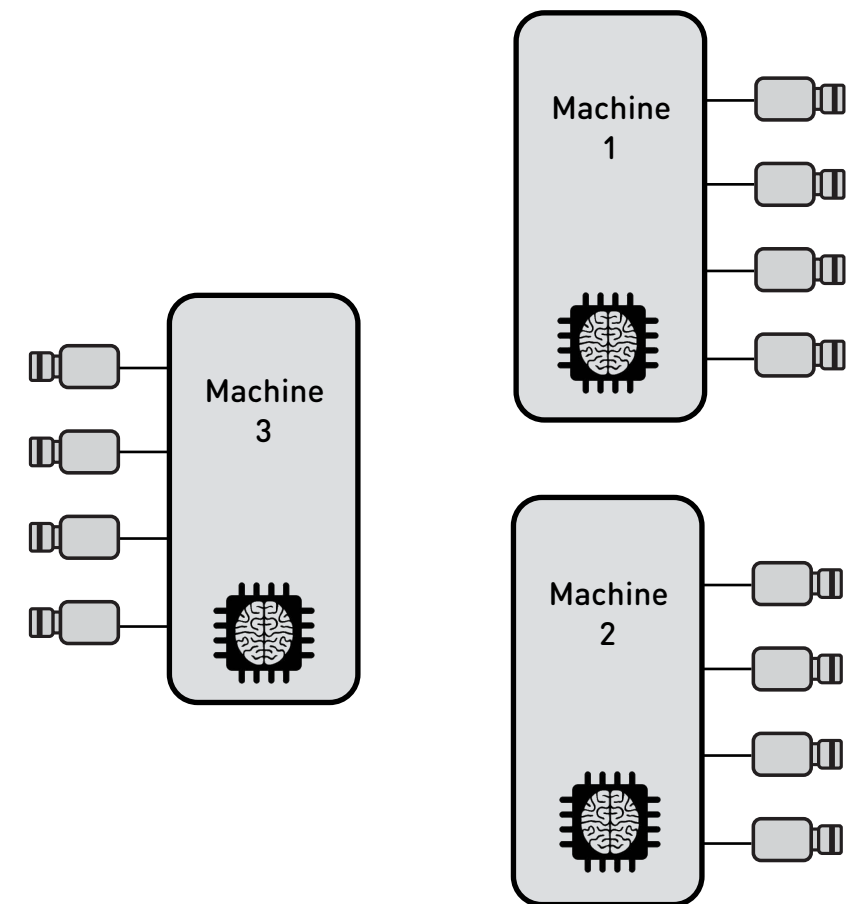


Recording or Acquisition & Processing

Acquisition and Storage



Acquisition and Compute



Software features summary

- Unlimited number of cameras and computers in a system.
- Modern, simple and effective user interface aimed for end users.
- Interface is separately optimized for desktop and touchscreen devices for indoor and outdoor use.
- Full remote control of distributed system provides exactly the same experience as with a local setup.
- Synchronized and timestamped recording across all cameras and data sources.
- Realtime low-latency multi-camera network live video streaming.
- Export of recorded data to common images and video formats.
- Highly optimized high-quality demosaicing for Bayer color cameras.
- Multi-GPU support for compressed recordings at virtually any frame rates.
- Highly optimized code guarantees very low CPU utilization even at highest data rates.
- Easy integration with user own software modules for online or offline data processing.
- Cross platform: Windows, Linux or mixed setups.

Software features summary

- Cross platform: Windows or Linux or mixed.
- Special interface enhancement to support touchscreen devices and outdoor use.
- Free unlimited updates.
- Recording capabilities to various data formats are summarized in the following table:

	Max frame rate	Max number of cameras	Storage type	Recording length
Uncompressed	Unlimited subject to storage performance	64 per PC subject to storage performance	Fast SSD	Tens of minutes
M-JPEG	~30 fps per CPU core based on color HD camera and i7700 CPU	~ 4 - 8 subject to CPU performance	SSD / HDD	Hours
H.264 / H.265 (GPU required)	~800 fps per GPU based on RTX 20-series GPU and color HD camera	Unlimited	SSD / HDD / NAS	Hours

Simple and intuitive user interface

(screenshot of image acquisition tab)

The interface is divided into several sections:

- Recorder** and **Media Manager** tabs are visible at the top left.
- System** tab is at the top right.
- Two main camera viewports show Earth from different angles. The left viewport is labeled **Europe** and the right one is labeled **Pacific**.
- A third viewport at the bottom left shows Earth from the **Atlantic** perspective.
- A central panel displays a **List** and **Map** of satellite positions around the globe.
- Recording Mode** panel on the right includes:
 - Record:** Space
 - Scene:** Earth
 - REC** button (red dot)
 - Free space:** 00:12 (with a green progress bar)
 - Camera Settings** section:
 - Image Format:** Width: 1920, Height: 1080, Pixel format: Color, Pixel precision: 8
 - Frame Rate and Exposure:** Frame rate: 10.00, Exposure, μ s: 10000.00
 - Sensitivity:** Gain: 1.00, Black level: 0
 - Manufacturer specific** (expanded)
- Bottom right controls include checkboxes for **Zebra** and **Focus assist**, and buttons for **Save**, **Load**, and a lock icon.

Simple and intuitive user interface

(screenshot of recording playback and management tab)

The screenshot displays a software interface with three main sections: Recorder, Media Manager, and System.

Recorder: A tab at the top left.

Media Manager: The central area, divided into two panels. The left panel, titled "Recorded media", contains a table with columns for Name, Date & Time, and Length. The right panel shows a video playback window with a globe, a progress bar, and playback controls.

System: A tab at the top right, containing a "General media storage" section with a table of storage locations.

Name	Date & Time	Length
Crystals	03-Apr-18	
Pour1	15:11:22	00:00:09
Pour2	15:20:51	00:00:10
▶ Test recording	03-Apr-18	
▶ CXP Camera test	29-Jan-19	
▶ USB Camera test	07-Feb-19	
▶ CLHS Camera test	12-Feb-19	
▶ Mixed cameras test	11-Mar-19	
▶ GigE camera test	13-Mar-19	
▶ Record Mode test	23-Mar-19	
Record only	16:23:28	00:00:18
Record + Processing	20:16:04	00:00:16
Triggered	20:17:07	00:00:09

Playback controls include play, stop, and next buttons, a progress bar, and a time display showing 00:00:01:06. The camera is set to "Europe" with resolution 1920 x 1080, 10.00 fps, and exposure 30 ms. A "Make notes here" text area is present below the camera settings.

Buttons for "Move", "Copy", "Export ...", "Process ...", and "Open folder" are visible at the bottom.

General media storage:

Name	Date & Time	Length
▶ Space	03-Apr-18	
▶ High Precision Recording	12-Feb-19	

Free space indicators are shown at the bottom of the Recorder and System sections.

Simple and intuitive user interface

(screenshot of recording system control, status and configuration tab)

The screenshot displays the user interface for the recording system, organized into several sections:

- Navigation Tabs:** Recorder, Media Manager, and System (active).
- Recorder Controls:** Two rows for Recorder 1 and Recorder 2, each featuring a green camera icon, the recorder name, a camera status icon, and a dropdown menu.
- Control Buttons:** Configuration, Turn ON cameras, Turn OFF cameras, Connect, Quit, and Hide.
- Utility Buttons:** Device map editor, Log, and Telemetry.
- Footer:** Multicamera Systems logo and version information (User interface version: 4.0, Recording server version: 4.0).

Please contact us for more information

info@multicamera.systems