	CAMERAS				CONVERTERS		
	DV/HDV	HD Webcams: Logitech C920 MS Lifecam Studio	**DARTFISH 7 ONLY (or newer)** Onvif IP camera	Basler High Speed camera	**DARTFISH 7 ONLY (or newer)** Blackmagic H.264 Pro Recorder	DV/ HDV Canopus converter	USB converter
Connection	FireWire	USB 2.0	Ethernet (RJ45)	Ethernet (RJ45), FireWire	Camera to converter : Composite /HDMI / SDI Converter to PC : USB 2.0	Camera to converter : Composite/ HDMI Converter to PC : FireWire	Camera to converter : Composite Converter to PC : USB 2.0
Max. cable length	20 m	1.5 m (extendable)	100 m	100 m	Composite : 30 m HDMI : 5 m SDI : 100 m USB : 5 m	Composite : 30 m HDMI : 5 m Firewire : 20 m	Composite : 30 m USB : 5 m
Dual camera input	✓	✓	✓	✓	✓	✓	✓ Not recommended
Video stream	DV/HDV	MJPG	H.264	BYGB	H.264	DV/HDV	RCB/YUV
Zoom (optical/digital)	✓/✓	Limited digital zoom	✓/✓	✓/✓	Image settings defined by video source		
Focus	Manual	Automatic	Manual	Manual			
Shutter speed	Max 1/10000	Basic control	Max 1/30000	Max 1/10000000			
Frame rate	Max 60 fps	Max 30 fps	Max 60 fps	Max 60 fps			
Resolution	480i/1080i	Max 1080p	Max 1080p	Max 1080p			
Installation procedure	Plug & Play	Minimal procedure	Advanced procedure	Advanced procedure	Minimal procedure	Plug & Play	Plug & Play
System requirements	Recommended	Minimum	Minimum	Recommended	Minimum	Recommended	Recommended
Live encoding 1	✓/✓	✓	✓	n/a	✓	✓/✓	✓
Pause recording 2	✓/✗	✗	✗	n/a	✗	✓/✗	✗
Time shifted recording 3	✓/✓	✗	✓	n/a	✓	✓/✓	✗
Publish event clips 4	✓/✓	✗	✓	n/a	✓	✓/✓	✗

(Left sidebar labels: IMAGE QUALITY — covers Zoom through Resolution rows; DARTFISH LIVE TAGGING — covers Live encoding through Publish event clips rows.)

1   The Video Recorder and Tag Live tools can encode video while recording. Dartfish.tv users can save a lot of time by using their channel's encoding profile when recording.
2   Pause recording lets you exclude parts of the game from the recording without creating multiple video files.
3   Time shifted recording allows you to review earlier parts of the recording while continuing to record.
4   Use Publish Event clips to create video files from events while continuing to record

1

	Budget in US$ (indicative price)	Pros	Cons	Use cases
HD webcams: Logitech C920 MS Lifecam Studio	50 - 100	+ Price + Video quality + USB 2 connection (no additional power required) + Attaches to any tripod	- Limited digital Zoom only - MS Lifecam requires driver selection manually in Windows 8	- Bike fitting - Gait analysis - Other static camera use
DV / HDV camera	250 – 1'000	+ Versatility + Video quality (HDV) + Fire wire direct connection + Manual focus / zoom	- Availability - Needs computer with Firewire input or express card slot	- Swing analysis (Golf, Tennis) - General video analysis
Onvif IP camera	500 – 3'000	+ Video quality + Compression + Outdoor usage + Fixed placement	- Installation - Configuration - Flexibility with manual focus - Not mobile	- Infrastructure projects (schools, gyms arenas) with multiple camera usage - Swing analysis (Golf, Tennis) - Bike fitting - Gait analysis
Basler high speed camera	1'000 – 3'000	+ Shutter speed + Frame rate + Video quality	- Installation - Configuration - Flexibility with manual focus - Heavy video stream (requires high end PC / Laptop	- Swing analysis (Golf, Tennis) - Bike fitting - Gait analysis - Biomechanics
USB converter	70 – 150 + Camera	+ Enable use of any camcorder + No additional power required + Capture video from any analog source	- Uncompressed video stream - Video quality (SD resolution)	
Firewire converter	200 - 600 + Camera	+ Enable use of any camcorder + Professional quality converters + Can be used to capture from other devices (TV, DVD players, etc.)	- Availability of fire wire input on Laptops - Additional power cable may be required	
Blackmagic H.264 Pro Recorder	450 + Camera	+ Video quality + Compression + Flexibility of camcorder choice (HDMI, Composite in) + SDI / HD-SDI Input for TV-Signal	- Latency of displaying image on screen - Additional power cable is required	

2