

## Miniture HD Video that is Waterproof

Posted on November 23, 2010

### Originated from David Forcucci on Mon, 22 Nov 2010

My daughters day care calls it "show and share" .....

I pulled out my GoPro on the BIOS bus and had lots of ooohs and aahhs. So I thought I would share this.

<http://www.goprocamera.com/>

Cost \$400 with 32 GB SD memory card:

#### Highlights:

127 degree wide angle lens ("lens is king" quote from their web site which is what sold me)

Waterproof housing

Glass lens port on housing (doesn't scratch easily)

HD video in multiple resolutions

5 mega pixel jpeg photos

Time laps photo function

The original housing port blurs the image underwater so you need a flat port for clear images underwater. I use a modified flat port that I made myself but I just ordered this one that I learned about from the dive operator at the Grotto Bay Resort! Cost is about \$50 over the Gopro housing. And it is a glass flat port!

<http://www.sartek.com/proddetail.php?prod=2HDHEROHSG>

Here is a video I recently did using the GoPro: <http://www.youtube.com/watch?v=40QXnZcotUM>

Have fun!

Dave

Seattle, Healy

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**Reply from: Thomas Wilson on Mon, 22 Nov 2010**

Hi All,

Although my good old Canon PowerShot SD400 is small enough to fit in the front compartment of my nerd pouch and cheap enough to buy a spare on EBay, it's definitely NOT waterproof. Enter the Casio ExiLim C721 - a 5 megapixel still/video camera with 3X optical zoom that is waterproof, shockproof, and a stylish and reasonably smart flip phone besides:

[http://reviews.cnet.com/cell-phones/casio-exilim-c721-verizon/4505-6454\\_7-33675594.html](http://reviews.cnet.com/cell-phones/casio-exilim-c721-verizon/4505-6454_7-33675594.html)

We gave one of these to my daughter for her high school graduation in June. She is a famous killer of portable electronics but so far the ExiLim has proven to be Maryproof as well. These are still available on Verizon for free on a 2 year plan.

Glad to hear the meeting went well,  
Tom

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### **Reply from Doug White on Mon, 22 Nov 2010**

Thanks for sharing Dave - the wheels are a turning.

We've gotten a lot of use from the Wingscape Birdcam 2.0 outdoor camera for making time lapse videos:

<http://www.oceanbytes.org/2010/10/25/time-lapse-video-on-the-cheap/>

While not 100% water proof, it is designed for outside use and can do either time lapse shots or take shots based on activation of the built-in motion sensor.

It runs on 4 D-cell batteries and can operate for a number of weeks on them, or you can feed in external power to keep it shooting longer.

Cost ~ \$150.

Doug

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**Reply from Brian Guest on Mon, 22 Nov 2010**

I purchased a Oregon Scientific ATC-2000 last year for about \$60 and the ATC-3000 is available for about \$100. The difference is the files size it can save with the 2000 holding about 1 hour of video. It is listed as water proof to 10 ft and I have used it on the end of a pick up pole for numerous applications. Not HD video but cheap, light weight, lots of mounting options and easy to use. Thought I would add it to the discussion.

Cheers.

Brian

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**Reply from Andrew Girard on Mon, 22 Nov 2010**

The GoPro herocam cameras that Dave originally mentioned have done a great job within the REMUS AUV lab, we've really put them through the wringer and gotton some amazing info that we'd typically would not have available and its usually by putting the camera in harms way. The wide angle is the way to go. One of the WHOI divers uses it to document all his work (proof he tiwrapped that shackle on the mooring that got lost) I even took it to inspect my props after playing in the rocks on my personal boat.

They've been great!!

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**Reply From: Dale Chayes on Tue, 23 Nov 2010**  
**HD video: another option**

Here is another option for "point of view" video. Seems like the (current) high end.

<http://www.vio-pov.com/products-all/pov-hd.html>

HD1080p at 24fps  
142° field of view  
remote and local control and display  
\$600

not-quite-shipping-yet but promised for 12/22 delivery....

YMWW,  
-Dale

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Reply from: Stuart Halewood on Tue, 23 Nov 2010

Hi Guys,

Further to the camera talk and the GoPro Hero thread, here is a link to another supplier that has an adapted housing and flat lens for better underwater performance and less loss of the wide angle.

<http://www.eyeofmine.com/gopro/underwater/index.html>

I am considering mounting one on a instrumented drifting buoy system and so am interested in any other stories or info you have of mounting on platforms/AUV's and such.

Presently i am using a now old but good olypus SP-350 in an Olympus PT-30 housing for my stills and limited video. if you want to check out shots taken with that camera system check out my attempts (comments and criticism welcome!) at:

<http://www.stuarthalewoodphotography.com/>

Sad I missed the RVTEC meeting at BIOS but sounds like James and the Bermuda boys did you all proud. Nice to know the Atlantic Explorer is doing well.

Thanks for all the camera info so far also.

Cheers,

Stuart

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