

Real-Time Spectral Imaging:  
introducing the **ButterflEYE VIS**

**S128**



**Short facts**

The Cubert S128 is based on a highly integrated filter-on-chip technology. This design combines up to 25 single spectral channels with QVGA resolution. We integrated this with a state of the art intelligent camera and completed the whole setup with our industry leading spectral camera software.

This package enables data acquisition, data storage and data processing directly on the camera. Altogether we deliver to you the most integrated and lightest spectral camera available on the market. Together with our set of accessories you get the fastest access to UAV based imaging.

You have the choice of two options, ranging from 470 to 1000 nm enabling applications in remote sensing and everywhere else.

**Filter-on-chip spectral imager**

**Principal applications**

- UAV applications
- Precision farming
- Medical applications
- Remote sensing
- Quality control
- Vegetation monitoring
- 3D-hyperspectral surface models
- Spectral mobile mapping

**Special features**

- Optional 16 or 25 Channels
- Control panel for computerless operation
- Data storage on camera SD Card
- Wireless remote operation



# S128 ButterfLEYE VIS

## Technical specifications\*

| Camera properties       |                          |
|-------------------------|--------------------------|
| Detector                | Si CMOS                  |
| Digitization            | 10 bit                   |
| Measurement time        | down to 100 µs           |
| Camera interface        | USB, Power, GigE, E-SATA |
| Hyperspectral cube rate | up to 10 cubes/s         |
| Sensor resolution       | 2 megapixel              |
| Shutter                 | global                   |
| Data processing         | Smart Camera             |
| Storage                 | SD drive                 |
| Optical properties      |                          |
| Objective               | selectable               |
| Mount                   | C-mount objective        |
| Ground resolution       | selectable mm-m          |
| Physical properties     |                          |
| Environment conditions  | dry / non condensing     |
| Operating temperature   | 0 - 40 °C                |
| Weight                  | 380 g                    |
| Power                   | DC 5 V, 15 W             |
| Spectral properties     |                          |
| Wavelength range        | 450-600 nm, 16 channels  |
| Spectral Imaging        | Snapshot                 |
| Channel width           | 20 nm                    |

\*this information may be subject of changes

## What you should know

The ButterfLEYE cameras uses a unique filter on chip technology which opens up a sweet spot between multi-chip multispectral cameras and full-blown hyperspectral cameras. With a medium spectral resolution of 16 to 25 channels the device enables a spatial resolution higher than QVGA.

Everything is combined in a smart camera module which enables not only the data storage directly on the device, but also application related postprocessing on the camera itself.

The device features computerless operation with an action-cam-like operation scheme making it easy to set up and use it in the field. With our spectral imaging software we bring you a versatile tool for data acquisition and processing, and offer full access to remote operation.

## Cubert...

... was the first company concentrating on Snapshot Hyperspectral imaging. In 2011 Cubert presented the first high resolved snapshot Hyperspectrometer. Since this time our technological basis has highly evolved. Today our snapshot imaging spectrometers range from multispectral cameras to full-blown Hyperspectral cameras.