

# FigSpec-IQ

Portable hyperspectral camera

400-1700nm hyperspectral camera  
Obtain hyperspectral image data and analyze it  
anytime and anywhere



## Main characteristics

Internal sweep hyperspectral camera, wavelength range 400-1700nm

The spectral resolution (FWHM) can reach 2.5nm

The spatial resolution is up to 1920\*1920, and the number of spectral channels is up to 1200

Display and operation through 5-inch touch screen, resolution 1280\*720

Observe the world with spectrum

## Main function

|                        |   |
|------------------------|---|
| <b>Working mode</b>    | High precision imaging measurement mode<br>PC control mode<br>Line scan mode  |
| <b>User adjustment</b> | Users can flexibly set and adjust the exposure time, merge method, ROI area   |
| <b>Data format</b>     | Data format compatible with multiple formats (including envi)   |
| <b>Data export</b>     | USB Type-C is available   |
| <b>Working hours</b>   | 300 measurements can be made with a single charge (measurement conditions: measurement every 2 seconds, exposure time of 20 milliseconds) |

## Parameters

| Model number                | FS-1Q-VIS  | FS-1Q-VISNIR   | FS-1Q-SWIR   |
|-----------------------------|--|--|--|
| Spectroscopic method        | Transmission grating spectroscopy                    | Transmission grating spectroscopy                    | Transmission grating spectroscopy                    |
| Image resolution            | 1920 * 1920  | 1920 * 1920  | 1280*1280  |
| Dynamic range               | 12 bits  | 12 bits  | 12 bits  |
| Imaging speed               | 5s   | 5s   | 5s   |
| Spectral channel number     | 500  | 1200   | 1024   |
| Spectral range              | 400-700nm  | 400-1000nm   | 900-1700nm   |
| Optical harmonic resolution | 2.5 nm   | 2.5 nm   | 6nm  |
| Slit width                  | 25 um  | 25 um  | 25 um  |
| Transmission efficiency     | ≥60%   | ≥60%   | ≥60%   |
| Stray light level           | ≤0.5%  | ≤0.5%  | ≤0.5%  |
| Pixel size                  | 5.86um* 5.86um                                       | 5.86um* 5.86um                                       | 5um* 5um   |
| Detector type               | CMOS   | CMOS   | InGaAs   |
| Standard lens focal length  | 25 mm  | 25 mm  | 25 mm  |
| Minimum working distance    | 100mm  | 100mm  | 100mm  |
| Field Angle                 | 25 °   | 25 °   | 17°  |
| Minimum exposure time       | 21us   | 21us   | 1us  |
| Maximum exposure time       | 10s  | 10s  | 10s  |
| Signal-to-noise ratio       | 600/1  | 600/1  | 600/1  |
| Data interface              | USB3.0   | USB3.0   | USB3.0   |
| Camera lens interface       | C  | C  | C  |
| attachment                  | USB3.0 transmission line                             | USB3.0 transmission line                             | USB3.0 transmission line                             |
| Auxiliary imaging function  | The auxiliary view camera monitors the shooting area | The auxiliary view camera monitors the shooting area | The auxiliary view camera monitors the shooting area |