



PRODUCT DATA SHEET

BLACKMOBILE



HAIP Solutions BlackMobile is a smart handheld visible and near-infrared hyperspectral imaging camera that allows the fast and easy acquisition of spectral data on the go, for on-site results. A Broadband LED lighting unit is integrated into the camera so that external lighting is no longer necessary.

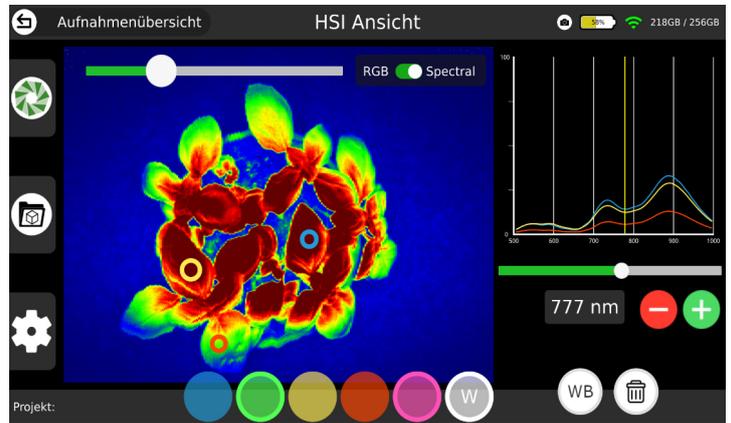
With the large touchscreen display and a simple user interface, practical usability is guaranteed. No deep expertise is needed in using the camera or interpreting the result, everything is made ready and processed results can also be shown on the display.

Features

- Smart mobile hyperspectral camera
- Fast & easy to use
- Broadband LED lighting unit integrated
- VNIR (500-1000 nm) HSI & 4K RGB
- High Signal-to-noise ratio in NIR range
- 100 spectral bands
- 7" touchscreen display
- Internal GPU for data processing



Rear view of the BlackMobile with LED broadband illumination



Screenshot from the marker panel of the BlackMobile software

Spectral Properties	
Wavelength range	500-1000 nm
Number of bands	100
Spectral resolution	5 nm
Spectral sampling	5 nm
Spatial Properties	
Resolution RGB	3840 * 2160 px
Resolution Spectral	640 * 480 px
Optical Properties	
Field of View (FOW)	22 * 16,5 cm (at 50 cm)
Sensor Properties	
Detector	CMOS
Radiometric resolution	10 bit
Integration time (cube)	< 3 seconds
Data size (raw)	120 MB/ Data cube
Camera Properties	
Connection	USB-C, WIFI
Operation temperature	0 - +30°C
Protection class	IP 64
Power consumption	20V / 5A USB-C PD
Size	250 * 165 * 70 mm
Weight	1.500 g

Hyperspectral Imaging on the go

No previous experience or expertise in hyperspectral imaging is required. The user interface on the camera display, guides you through the imaging steps and helps you to validate the data quality.

The hyperspectral sensor provides a spatial resolution of 640 * 480 pixels with 100 spectral channels to be read in, within the wavelength range from 500 nm to 1000 nm. The desired spectral ranges can be individually selected.

In order to enable photo documentation, a 4K RGB sensor is implemented, with which an RGB live stream is also visible on the display at the same time. This also allows the user to keep an eye on the image detail to be measured at all times.

BlackMobile can be charged via the USB-C port with a external power adapter or a mobile powerbank. Establish a remote connection via USB or WiFi and control your BlackMobile camera remotely from your computer to collect, study and import data.