

Vision System Quest Pro

Description

The Vision System Quest Pro, hereafter called “QuestPro”, is a device for measuring the statistical distribution of coated seeds within a lot under laboratory conditions. Coating and seed geometry is measured with a camera. A light barrier is used to trigger the flash light and the camera to capture the free falling seeds. To get a sharp and distortion free image, a telecentric lens is used together with a very short flash on time.



Camera

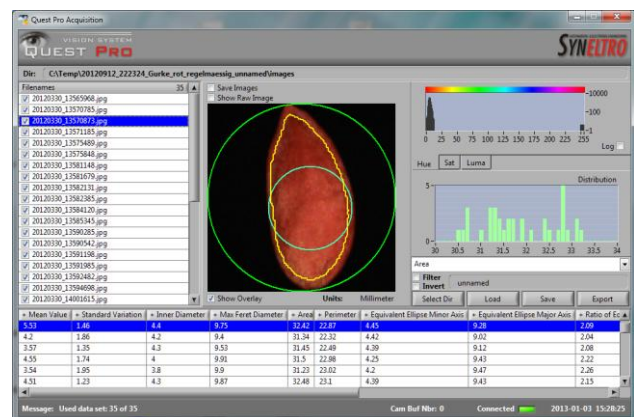
The camera is a GigE color camera from Allied Vision Technologies. The camera can be connected to a WLAN network or directly to a computer.

Flash Controller

After a trigger signal has been generated by the light barrier, the flash controller generates all the timings needed to capture an image. A high speed current source guarantees very accurate exposure time to keep illumination on all the images the same. The image is then transferred to a computer for further processing of the image.

Software

The data are analyzed and statistically visualized by the software to generate reports and to compare different data sets.



Technical Data

Camera System

Type:	AVT GC655C
Resolution:	659 x 493pixel
Pixel Size	9.9 x9.9 μ m
Voltage:	12Vdc (5V to 16V)
Power	less than 3W
Objective:	SILL TZM 0199/0.2-C

Light Barrier

Voltage:	12Vdc
Power:	500mW
Light:	IR (890nm)

General

Working Temperature:	10 to 50°C
Max. Humidity:	80% rel. up to 31°C (not condensing), linear decreasing to 50% until 40°C
Weight:	6.6kg
Usage:	For indoor use only, up to 2000m above sea level

Flash Controller

Voltage:	12Vdc
Power (LED off):	700mW
LED Set Voltage:	25 to 75Vdc
LED On Time:	100us

Flash Light

Type:	LED Ring Light
Light Color:	White

Dimension

