

ImagerBio C, Combined Colorimetric MicroArray and ELISPOT Imager

DESCRIPTION

ImagerBio C is a compact and portable instrument designed for imaging colorimetric Microarrays and Elispots. The instrument by standard operates in brightfield and darkfield illumination modes with bottom and top illuminations respectively. The instrument is able to work with 96-well plate, a 12×8 well strip, as well as microscopic glasses (placed in a special adapter). The device is equipped with a highly sensitive CMOS camera. The instrument has an automatic mechanism of 96 well plate ejection outside the body.

Unit uses various autofocus methods.

The instrument can be operated by a 20V portable lithium-ion battery, which makes the device usable in the field studies or point-of-care.

The compact design allows the device to be carried in the hand luggage of the aircraft.

Software Features:

- Working in Microarray or Elispot interface
- End-User interface, with simplified functional, where user just chooses assay, loads samples and gets results. Visual validation step is optional
- Automated image acquisition, analysis and report generation (up to 12×12 array in 96 well plate in under 3 minutes)
- Automatic array finder via machine learning and image recognition
- Grid lay-outing (Manual and Automatic)
- Password protected Assay Developers interface with full access to the vast software parameters
- Analysis of images by the average/median intensity of the spots
- Qualitative/quantitative analysis of the arrays
- Creating Qualitative/quantitative analysis assays
- Quantitative assays with 4/5 parameter logistics functions, etc.
- Setting multi level interpretation thresholds for different type of samples in the same well (e.g. tolerance to egg and lettuce)
- Reports available in PDF, CSV, EXCEL files
- Control of camera exposure, gain, XYZ kinematics.



CAT. NUMBER

BSM000101-A01

230VAC 50/60Hz Euro plug

SPECIFICATIONS

Illumination	Channels Brightfield, Darkfield (bottom, top illumination)
Arbitrary units measurement range	0 to 65,535
NIST Certified OD measurement range (for brightfield)	0.1 to 2.0 OD
NIST Certified Diffused reflectance meas. range (for darkfield)	2 to 99
Plates and Vessels	96 well plate / 12 × 8 well strip / 4 microscope slides
Light source	LED
Lifetime of the light source	>10,000 hours
Data interface for unit controls / camera	USB 2.0 / USB 3.0
Camera	CMOS
Standard image resolution	1280×1280 pixels
Resolution	6 µm per pixel, 5–7 per user request
Image formats	png or tiff, 16 bit
Focus	Manual, Automatic, adjustable via PC
Software	Included
PC requirements	CPU: Intel i7, RAM: 8 GB Video card: Nvidia GTX 1050 Ti 4GB, or better (Capability only with Nvidia cards) SSD: 256 GB, OS: Windows 10/11 (64 bit)
Overall dimensions (W×D×H)	330×345×150 mm
Weight, w/o power supply	not more than 6 kg
External power supply	Input AC 100–240 V 50/60 Hz, Output DC 20–24 V, 2.5A