

ImagerBio F, Fluorescent MicroArray Imager

DESCRIPTION

ImagerBio F is a compact and portable fluorescent imager designed for imaging fluorescent microarrays. The instrument by standard operates on 2 channels: CY3 and CY5. 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 takes images from the below, so the wells must have a transparent bottom. The device is equipped with a highly sensitive CMOS camera capable of taking more sensitive images in a shorter exposure times, which saves operating time. Image filtering goes through fluorescent filters. The instrument has an automatic mechanism of tray ejection outside the body.

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

The device is available in 2, 3 or 4 channel configuration: DAPI, FITC, CY3, CY5. Qdot options are also available.

The compact design of 2/3 channel version allows the device to be carried in the hand luggage of the aircraft.

Software Features:

- Automatic array finder via machine learning and image recognition
- Grid layouting (Manual and Automatic)
- 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)
- Report exports to PDF, CSV, EXCEL
- Control of camera exposure, gain, XYZ kinematics



CAT. NUMBER

	2 channels
BSM000102-A01	230VAC 50/60Hz Euro plug
	3 channels
BSM000103-A01	230VAC 50/60Hz Euro plug
	4 channels
BSM000104-A01	230VAC 50/60Hz Euro plug

SPECIFICATIONS

Fluorescence channels	CY3, CY5
Optional Fluorescence channels	DAPI, FITC, CY3, CY5, Qdots
Arbitrary units measurement range	0 to 65,535
Plates and Vessels	96 well plate / 12 × 8 well strip / 4 microscope slides
Light source	Laser
Lifetime of the light source	>10,000 hours
Data interface for unit controls / camera	USB 2.0 / USB 3.0
Camera	3 MP, CMOS
Standard image resolution	1280×1280 pixels
Resolution	6 µm per pixel, 5–7 per user request
Image formats	png/tiff 16 Bit, or other on request
Focus	Manual, adjustable via PC
Exposure	Controllable, up to ~10 s
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 (2/3 channel)
Weight, w/o power supply	not more than 8 kg (2 channel)
External power supply	Input AC 100–240 V 50/60 Hz, Output DC 20–24 V, 2.5A