

ZEISS LSM 980 Super Resolution Microscope

Details: Make: Zeiss

Model: LSM 980

Specifications:

At 512×512 pixels: confocal – up to 13 fps; Airy scan SR – up to 4.7 fps;
Multiplex SR-4Y – 25 fps; Multiplex SR-8Y – 47.5 fps;
Multiplex CO-8Y – 34.4 fps, 19×2 speed levels for confocal;
 512×16 pixels up to 425 fps; up to 6830 lines / sec,
 13×2 speed levels in Multiplex mode; up to 25 fps for 904×904 pixels;
up to 17.8 fps at $1,024 \times 1,024$ pixels.

Detector:

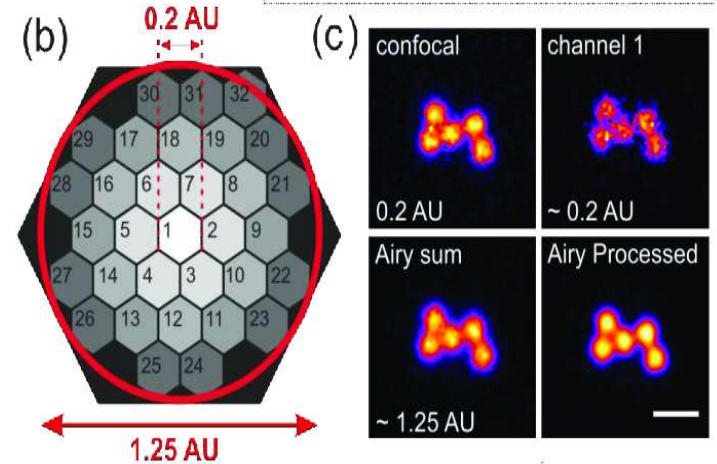
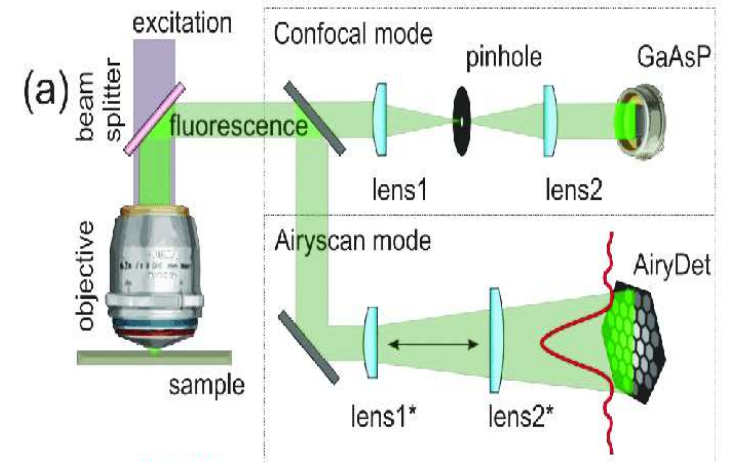
1, 4 or 32 GaAsP and/or PMT combined with 2 MA
PMT spectral detection channels, Airyscan 2 detector,
2 additional GaAsP channels (BiG.2),
Up to 12 non-descanned GaAsP or PMT detectors total,
Transmitted light detector (T-PMT).



Principle:

The Airyscan Principle Classic confocal laser scanning microscopes use point illumination to scan the sample sequentially. The microscope optics transform each point to an extended Airy disk (Airy pattern). A pinhole then spatially limits this Airy disk to block out-of-focus light from reaching the detector. Closing the pinhole gives higher resolution, but at the price of detecting fewer photons – and these photons cannot be brought back by e.g. deconvolution. Airyscan 2 is an area detector with 32 concentrically arranged detection elements. This allows you to acquire more of the Airy disk at once. The confocal pinhole itself remains open and does not block light, thus more photons are collected. This produces much greater light efficiency while imaging.

LSM 980 with Airyscan 2 is the ideal platform for confocal 4D imaging. The entire beam path is optimized for simultaneous spectral detection of multiple weak labels with the highest light efficiency. Add Airyscan 2 with its new Multiplex mode to get more imaging options to enhance your experiments. You can now choose the perfect setup to gently image larger fields of view with super resolution in shorter acquisition times than ever before.



PAYMENT:

External Users: Information

1. Academic Institutions: User can come personally and bring a letter from the Guide/HOD on the Institution's Original Letter Head along with the Registration Form and Demand draft. The letter must clearly indicate whether the samples are for Research or Consultancy purposes
2. . The letter should be addressed to Mr. Vinod Kumar Mishra Staff Scientist, Head, Sophisticated Equipment Facility(SEF) Centre For DNA Fingerprinting and Diagnostics(CDFD) Hyderabad
Email- sefcdfd@cdfd.org.in, vk mishra@cdfd.org.in
3. Industry& Non-Government Agencies: User can come personally and bring a letter signed by an authorized signatory of their Institution on Original Letter Head along with the Registration Form and Demand draft. The letter should be addressed to Mr. Vinod Kumar Mishra Staff Scientist, Head, Sophisticated Equipment Facility(SEF) Centre For DNA Fingerprinting and Diagnostics(CDFD) Hyderabad
Email: sefcdfd@cdfd.org.in, vk mishra@cdfd.org.in
Tariff for external users: Basic charges including GST* (as applicable) *GST rate as on 1.8.2017 General instructions to the users Payment Mode: Payment should in the form of a Demand Draft (DD) drawn in favour of "The DIRECTOR CDFD HYDERABAD".
 1. User should provide contact details to collect the data after the sample analysis is complete.
 2. The experimental data provided is only for research / development purposes. These cannot be used as certificates in legal disputes.
 3. Samples will not be analysed till payment is received. CENTER FOR DNA FINGER



**CENTER FOR DNA FINGERPRINTING AND DIAGNOSTICS
NATIONAL GENOMICS AND TRANSCRIPTOMICS FACILITY**

Uppal Ring Road, Hyderabad

CONFOCAL MICROSCOPY IMAGING –REQUISITION FORM

NAME		DATE :
NAME OF GROUP / SUPERVISOR		
INSTITUTION	a) CDFD [] b) Academic [] c) Industry[]	
TYPE OF IMAGING	a) Fixed [] b) Z-stacking [] c) Live – Cell Imaging[]	
No. of. SLIDES		No. of. CHAMBERS:
FLUORESCENT DYES USED	1)	Excitation / Emission range:
	2)	Excitation / Emission range:
	3)	Excitation / Emission range:
E-mail / PHONE		
DECLARATION	Does the sample contain any Radioactivity? Yes <input type="checkbox"/> No <input type="checkbox"/> Signat <input type="checkbox"/>	

Signature of Student

Signature of the Group Head