

3DRI

HoloView 3D In-situ Refractive Index Imaging Function Module



Innofocus has launched the world first 3D laser nanofabrication system equipment with in-situ refractive index imaging functionality called "HoloView 3DRI Imaging". This advancement represents a major breakthrough in laser nanofabrication sector, allowing on-line inspection of the fabrication outcomes and on-site correction of fabrication conditions.

It greatly reduces the time span required for photonic device fabrication and characterisation and in the meantime significantly increases the fabrication accuracy and reproducibility.

*World First In-situ
3D Refractive Index
Imaging Function*

REC

innoFOCUS CIPC
CUSTOMER INNOVATION & PRACTICE CENTRE

Refractive Index

Refractive Index

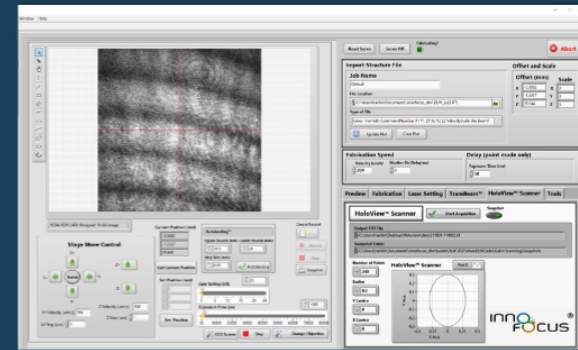
3D Profile

NanoPrint Premium & HoloView
In-situ 3D Imaging Edition

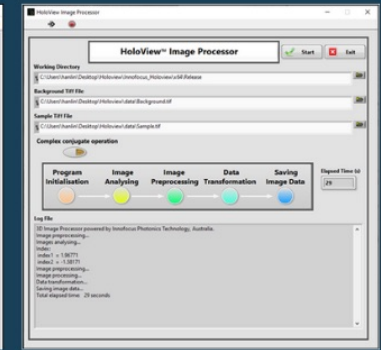
AUSTRALIAN MADE

Application Scenarios

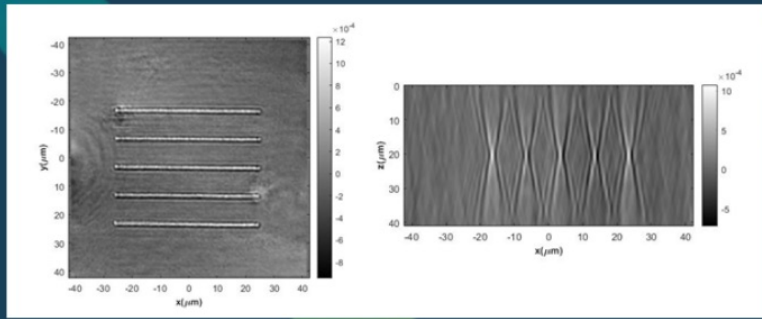
- Fabrication condition characterisation
- Fast parameter optimisation
- Optical waveguide morphology characterisation
- Optical material uniformity characterisation
- Internal damage characterisation for micro optical elements
- FBG in-situ characterisation
- Optical component material properties characterisation



HoloView Image Scanner

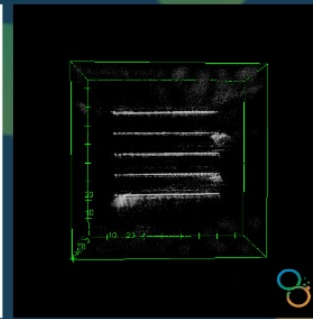


HoloView Image Processor

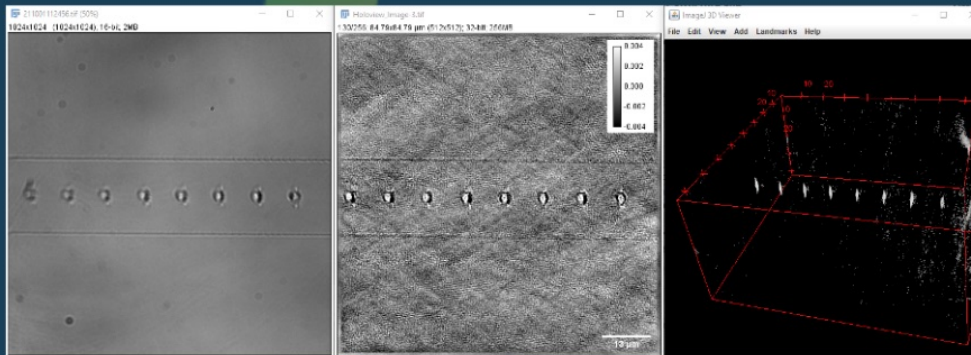


Waveguide Top View

Waveguide Side View



Waveguide 3D Image



FBG CCD Image

Reconstruction RI Image

FBG 3D Image

Customer Value

- The world's only commercially available high-resolution in-situ 3D refractive index distribution characterisation equipment,
- In-situ refractive index characterisation for rapid optimisation of design and fabrication parameters.
- Characterises a wide range of commonly used optical materials, including polymers, glass, sapphire, optical fibres, and more.
- Provides customers with an ever-expanding reference system for quantitative 3D refractive index measurements.
- Wide range of applications to test surface and internal refractive index distributions under extreme environmental conditions.
- Convenient one-button operation and highly efficient (less than 5 minutes for an imaging session).
- Obtain unique 3D refractive index distribution data for leading scientific research.