

High-NA Endomicroscopic Imaging Objective for 2-Photon Microscopy

GRINTECH's high-NA Endomicroscopic Imaging Objectives cascade the optical power of a plano-convex lens and a GRIN lens with aberration compensation to achieve an object NA of 0.8.

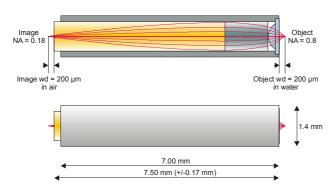
Applications: In vivo endomicroscopy, 2-photon microscopy, deep brain and tissue imaging, flexible fluorescence microscopy,

NA conversion

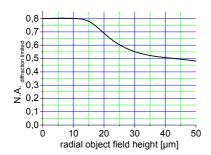
Product Code: GT-MO-080-018-810

Features: • Object NA = 0.80

- Description
 Object working distance 200 μm (water)
- Image NA = 0.18
- Magnification 4.8 x
- Recommended Excitation 800 900 nm
- Mounted in stainless steel holder

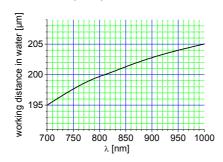


Diffraction limited NA versus Field



(from optical design simulation according to Marechal criterion @ 810 nm, wavefront RMS \leq 0.07 $\lambda)$

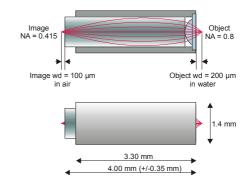
Chromatic Aberration in Object Space



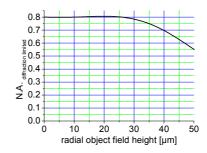
Product Code: GT-MO-080-0415-810

Features:

- Object NA = 0.80
- Object working distance 200 μ m (water)
- Image NA = 0.415
- Magnification 1.92 x
- Recommended Excitation 800 900 nm
- Mounted in stainless steel holder

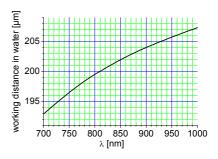


Diffraction limited NA versus Field



(from optical design simulation according to Marechal criterion @ 810 nm, wavefront RMS \leq 0.07 $\lambda)$

Chromatic Aberration in Object Space



Variations due to modifications of the production process are possible. It is the user's responsibility to determine suitability for the user's purpose.

Pat. US 7,511,891

4