

Nikon H-TIRF 2

Versatile fluorescence inverted widefield microscope equipped with three lasers, epifluorescence lamp, and back-illuminated sCMOS camera. The microscope is designed for short- and long-term imaging experiments under standard or TIRF illumination.

Links to manufacturer website:

<https://www.microscope.healthcare.nikon.com/products/inverted-microscopes/eclipse-ti2-series>

Application

- Fast and sensitive multicolor widefield imaging with TIRF, HILO or EPI excitation option
- Various measurement options: z-stack, time series, tile scan, multi positions
- Brightfield and DIC microscopy

Microscope

Inverted widefield microscope Nikon Eclipse Ti2 equipped with motorized XY stage, Perfect Focus System, H-TIRF module, insertable quarter-wave plate, insertable gradation neutral density filter, transmitted light lamp (Nikon TI2-D-LHLED) and following units:

Software	NIS-Elements AR (v. 5.20)
Epifluorescence	CoolLED pE-300, 400 nm, 460 nm, 550 nm
Laser excitation wavelengths	488 nm, 561 nm, 640 nm (all cw)
Filter turret	EM435-485 EM500-545 EM610/75 EM700/75 Quad Band Set - 405/488/561/640
Objectives	Nikon Plan Apo λ 20x, NA 0.75 , WD 1.00 mm Nikon Apo TIRF 60x Oil, NA 1.49 , WD 0.12 mm, Correction Collar 0.15-0.19, DIC
Tube lenses	1x 1.5x
Relay lens (mountable)	2.5x
Camera	PRIME BSI (Teledyne Photometrics) <ul style="list-style-type: none">• 2048 x 2048 pixels• pixel size: 6.5 x 6.5 μm• 63 fps @ 2048 x 2048 pixels, 11-bit data• QE_{max} > 95%