

Nikon Ni (focusing nosepiece) configuration chart

See the following pages for more product information.

6 Sample holders

H230B Breadboard insert plate	H230 Solid stage plate	H224LP Low profile 3 in x 1 in slide holder
H473UP Universal sample holder	H224ROT 3 in x 1 in manual rotating slide holder	H237LP Low profile 3 in x 1 in slide holder
H234LP Low profile, four 3 in x 1 in slide holder	H229UP Universal Petri dish holder	

1 Stages

H101NFN
ProScan Stage

6 Sample holders

H230B Breadboard insert plate	H230 Solid stage plate	H224LP Low profile 3 in x 1 in slide holder
H473UP Universal sample holder	H224ROT 3 in x 1 in manual rotating slide holder	H237LP Low profile 3 in x 1 in slide holder
H229UP Universal Petri dish holder	H234LP Low profile, four 3 in x 1 in slide holder	

1 Stages

ZDN12MP, ZDN12ME, ZDN12MK, ZDN12MF
ZDeck stages

3 Objective positioner

QG-OP-MIC-M25
Generic focus drive and adapter

QGOP200-UP-D1, QGOP400-UP-D1, QGOP400-UP-HL-D1, QGOP800-UP-D1, QGOP800-UP-HL-D1

QG-OP-OBJ-M25
Direct fine focus coupling

4 Autofocus

PF850
PF head, controller with digipot power supply

LF320
PF850 flange set

9 Nanopositioning sample holders

QGSP302XR
SP universal sample holder XR

QGSP303XR
Slide holder

QGSP301XR
SP multiwell holder XR

9 Nanopositioning stages

QGSP400-D1, QGSP600-D1, QGSP800-D1

7 Illumination

L200SNI, L220SNI
Fluorescence illuminator, built in shutter

L200NI, L220NI
Fluorescence illuminator

2 Excitation path

HF106A
Filter wheel, 6 position, 25 mm diameter filters

HF108A
Filter wheel, 8 position, 32 mm diameter filters

HF110A
Filter wheel, 10 position, 25 mm diameter filters

HF202HT
25mm high temperature standalone shutter

HF204HT
35mm high temperature standalone shutter

HF108A + HF201HT
8 position 32 mm diameter filter wheel plus shutter combination

HF110A + HF202HT
10 position 25 mm diameter filter wheel plus shutter combination

HF220
Filter wheel adapter (Nikon)

Nikon Ni (focusing nosepiece) configuration guide

The Nikon FN1 is a manual microscope designed for electrophysiology. Prior Scientific can motorize many aspects of this microscope.

Motorized XY stages and sample holders

All the sample holders listed in the first section of the above table are compatible with the H101NFN, which includes an adapter plate specific to the FN1 microscope. All the sample holders listed in the second section are compatible with the ZDN12MP, ZDN12ME, ZDN12MK, and ZDN12MF. The ZDeck systems are supplied with a H31XYZE / V31XYZE controller and CS200 joystick (-MK and -MF variants are not motorized, so no controller or joystick are supplied), an adapter for the sample holders, an H473 universal sample holder, and a Nikon 108 mm ring insert.

Part	Description
H101NFN	H101A stage, Nikon FN1
H473UP	Universal sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assy

ZDeck stages and sample holders

Part	Description
ZDN12MP	ZDeck, Nikon, 2 mm pitch, 200 step, motorized
ZDN12ME	ZDeck, Nikon, 2 mm pitch, 200 step, motorized, encoded
ZDN12MK	Manual ZDeck, Nikon
ZDN12MF	ZDeck, Nikon, fixed
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assy

Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please get in touch with Prior Scientific if the microscope has another brand of the motorized stage. Note that a sample holder from the nanopositioning stage section is required for use and replaces the sample holder fitted to the motorized stage. Please discuss the use of a nanopositioning stage with Prior Scientific when placing your order if using a rotary nosepiece.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x 3 in and 2 in x3 in slides

Objective positioners and adapters

When ordering, ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter to be fitted to the microscope nosepiece and the microscope objective. Nikon microscopes typically use M25 threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some FN1 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Nikon Software requires using the Nikon Realtime Controller.

Part	Description
QGOP200-UP-D1	OP200 Objective Scanner with NPC-D-6110 controller Upright 0-500g load
QGOP400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for upright microscopes (0 – 500 g load)
QGOP400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for upright microscopes (500 – 1000 g load)
QGOP800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for upright microscopes (0-500 g load)
QGOP800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for upright microscopes (500-1000 g load)
QG-OP-MIC-M25	OP microscope adapter M25 x 0.75
QG-OP-OBJ-M25	OP objective adapter M32 x 0.75 to M25 x 0.75
QG-OP-SPACE-M25	M25 x 0.75 static objective spacer to align with OP400 objective

Illumination

The L200NI and L200SNI are recommended for fluorescence microscopy, [see datasheet for details](#). Note that the L200SNI has a built-in shutter mechanism that can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220NI and L220SNI are available for customers doing fluorescence imaging in the far-red. The L200 and L220 systems can be fitted to the NI-FLEI episcopic attachment.

Part	Description
L200SNI	L200 standard box, lamp, light guide, shutter and Nikon collimator
L200NI	L220 standard box, lamp, light guide and Nikon collimator
L220SNI	L220 standard box, lamp, light guide, shutter and Nikon collimator
L220NI	L220 standard box, lamp, light guide and Nikon collimator

Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel, it is recommended to buy one of the combinations listed above. The HF220 adapter is required for filter wheels and shutters in the episcopic illumination pathway. Addition of excitation path components requires the NI-FLEI epifluorescence attachment. Shutters and filter wheels cannot be added to the diascope illumination pathway.

Part	Description
HF220	Filter wheel adapter (Nikon)
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination