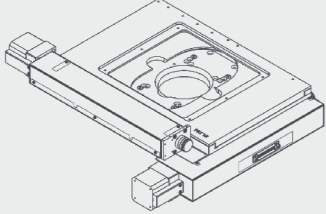
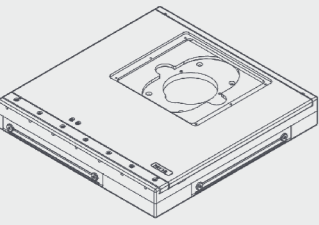


Evident/Olympus MX50/MX51 configuration chart

1 Stages

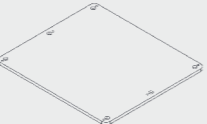


H105/20L, HE05/20L
ProScan stage

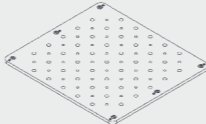


H105N20L, H105E20L
ProScan stage

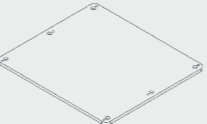
6 Sample holders



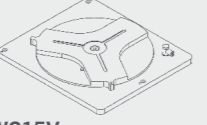
H227
Glass stage plate assembly




H231B
Breadboard stage insert assembly



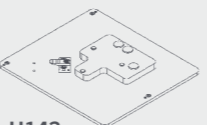
H231
Aluminum stage plate assembly



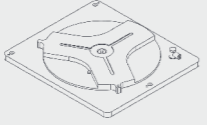
HWC15V
Wafer chuck rot + vac 150 mm



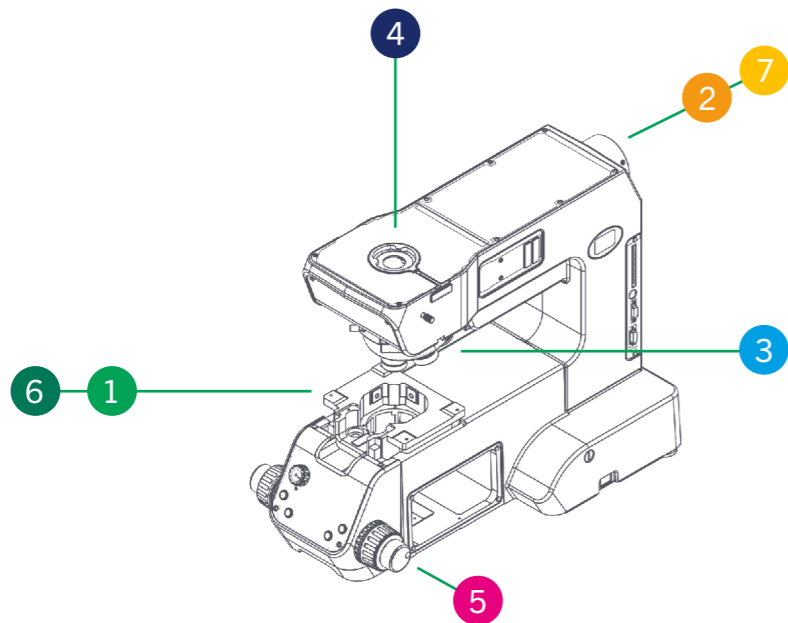
H146
Wafer chuck, 150 mm sprung



H143
Wafer chuck spring loaded 3 in



HWC15S
Wafer chuck (4 in & 6 in wafers)



4 Autofocus




PF850 / PF850M
PF head, controller with digipot power supply, cables




LF335
PF850 flange set

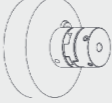
5 Motorized focus



PS3H122R
Generic focus drive and adapter

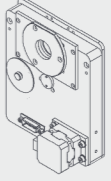


H807
Focus sleeve



H122KBIX
Direct fine focus coupling

2 Excitation path



HF108A
Filter wheel, 8 position, 32 mm diameter filters



HF235
Filter wheel adapter



HF204HT
35mm high temperature standalone shutter

3 Objective positioner



QG-OP-MIC-RMS
Microscope adapter



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



QG-OP-OBJ-RMS
Objective adapter

7



L200SOL, L220SOL
Fluorescence illuminator, built in shutter



L2000L, L2200L
Fluorescence illuminator

See the following pages for more product information.

Evident/Olympus MX50/MX51 configuration guide

The Evident/Olympus MX50 and MX51 are microscopes designed for semiconductor analysis.

Stages and sample holders

The H105/20L, HE05/20L, H105N20L and H105E20L are the largest stages available for this microscope due to its throat distance. The H105N20L and H105E20L feature a flat top design for easy loading. All sample holders listed are compatible with all types of stage. The HWC15V is fitted with a vacuum nozzle but no vacuum pump system is supplied.

Motorized XY stages and sample holders for up to 6 inch diameter wafers

Part	Description
H105/20L	ProScan stage, 154x154 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE05/20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H105N20L	ProScan stage, 154x154 mm travel, non-encoded, 2 mm pitch, 200 step, Evident/Olympus
H105E20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H227	H105 glass stage plate assembly
H231	H105 aluminum stage plate assembly
H231B	Breadboard stage insert assembly (H105)
H143	Wafer chuck spring loaded 3 in
H146	Wafer chuck, 150 mm sprung, H105 stages
HWC15S	H105 wafer chuck (4" & 6" wafers)
HWC15V	Wafer chuck rot+vac 150 mm/H105

Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some MX50 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 objective positioner via Evident/Olympus Software requires the use of the Evident/Olympus 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-RMS	OP microscope adapter RMS
QG-OP-MIC-W26	OP microscope adapter M26
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-OBJ-W26	OP objective adapter M26
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve.
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes.

Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF200	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see [datasheet](#) for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 standard box, lamp, light guide and Evident/Olympus 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 HF235 adapter is required for filter wheels and shutters in the episcopic and diasopic illumination pathways.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF204HT	35 mm high temperature standalone shutter
HF108A	8 position 32 mm diameter filter wheel plus shutter combination without stand