BOB™

Open-Design Upright Microscope

- [Product Description](#)
- [Specifications](#)
- [Prices | Configuration](#)
- [Technical Information](#)

The Sutter BOB™ — designed to eliminate the conventional microscope frame—is a simple, open-design upright microscope platform ideal for slice electrophysiology, wide field functional imaging, two photon retinal imaging, photostimulation and new techniques just being developed! A microscope, in its simplest form, is an objective and a tube lens. Other components of most modern microscopes are designed to serve specific functions: different types of experiments, methods of illumination and means of signal detection.

Replacing the microscope frame with an optical rail builds in the ability to adjust the overall height of the microscope, unheard of in conventional microscope designs. Work on slices in January, do in vivo experiments in March. The BOB microscope is a compact, single assembly that mounts to the "blue rail" with one massive, stable connection. Focusing is motorized and incorporated between the focus arm and the optical rail.

Fluorescence epi-illumination is built into the basic BOB via an Olympus vertical illuminator. LED transmitted light illumination uses the Olympus Oblique Coherent Contrast (OCC) condenser. Sutter's TLED and TLED controller form the trans-illumination light source. The TLED controller is capable of being triggered with a digital signal eliminating the need for shutters and adding the ability to photostimulate from the trans location. In experiments where transmitted light is not desired, the LED, condenser focus mechanism and OCC condenser are easily removed as a single assembly. Additionally, the transmitted light

path is shorter than in other frames, allowing the microscope body to sit significantly lower than a conventional microscope. When the microscope is shorter, there is more stability, increased ergometrics and ease of use.

The Sutter BOB when configured with an optional motorized XY stage or translator with MPC-200 controller, takes full advantage of our free Multi-Link™ software program for micromanipulator positioning. During whole-cell patch recording in slices, it is common to search a large area of the slice to find appropriate neurons. If the BOB is configured with Multi-Link, after you find your target, Multi-Link will then retrieve your recording and stimulation pipettes to the same field of view so that you can begin recording immediately. If later you need to stimulate a region outside the current field of view, Multi-Link can release the recording pipette and allow you to reposition the objective and stimulating pipette(s) to the new stimulation region.

APPLICATIONS
- *in vivo* and *in vitro*
- Whole-cell imaging
- Intracellular imaging
- Material science

FEATURES
- Optional motorized fixed XY stage or motorized translator
- Open design microscope with motorized focus
- Quickly configurable based on experimental needs
- Optimized to allow *in vivo* and *in vitro* experimentation on one setup
- Designed for use with Olympus objective lenses
- Free Multi-Link™ software coordinates movement with micropipette positioning of MPC-200
- Oblique Coherent Contrast (OCC) or Differential Interference Contrast (DIC)
- Epi-fluorescent illumination

TECHNICAL SPECIFICATIONS

Dimensions
9.1 in x 10.8 in x 20.4 in | 23.1 cm x 27.5 cm x 51.9 cm

Weight
BOB
23.9 lbs | 10.8 kg
BOB-TL
29.3 lbs | 13.3 kg

Electrical
115/230 volts
50/60 Hertz power line

CONFIGURE YOUR BOB™ MICROSCOPE

STEP 1
Use this chart to determine the BOB system suited to your requirements

BOB SYSTEMS WITH FLUORESCENCE

CATALOG NUMBER	Trinocular head or camera mount	Transmitted light	Add a second wavelength to transmitted light
BOB-FL	Camera	No	No
BOB-FLTL	Camera	Yes	No
BOB-FLTL2	Camera	Yes	Yes
BOB-FLTR	Trinocular Head	No	No
BOB-FLTRTL	Trinocular Head	Yes	No
BOB-FLTRTL2	Trinocular Head	Yes	Yes

BOB SYSTEMS WITHOUT FLUORESCENCE

CATALOG NUMBER	Trinocular head or camera mount	Transmitted light	Add a second wavelength to transmitted light
BOB	Camera	No	No
BOB-TL	Camera	Yes	No
BOB-TL2	Camera	Yes	Yes
BOB-TR	Trinocular Head	No	No
BOB-TRTL	Trinocular Head	Yes	No
BOB-TRTL2	Trinocular Head	Yes	Yes

US PRICES > BOB™

International prices vary by country. Please contact your local distributor or Sutter Instrument for a quotation. Prices subject to change without notice.

*BOB systems **with** fluorescence*

Catalog Number	Description	Price
BOB-FL	BOB microscope with epi-illuminator	**$ 17,900**
BOB-FLTL	BOB with epi-illuminator, transmitted light	**$ 22,400**
BOB-FLTL2	BOB with epi-illuminator, dual transmitted light	**$ 23,800**
BOB-FLTR	BOB with epi-illuminator, trinocular head	**$ 24,700**
BOB-FLTRTL	BOB with epi-illuminator, trinocular head, transmitted light	**$ 29,200**
BOB-FLTRTL2	BOB with epi-illuminator, trinocular head, dual transmitted light	**$ 30,600**

*BOB systems **without** fluorescence*

Catalog Number	Description	Price
BOB	BOB microscope	**$ 12,900**
BOB-TL	BOB with transmitted light	**$ 17,400**
BOB-TL2	BOB with dual transmitted light	**$ 18,800**
BOB-TR	BOB with trinocular head	**$ 19,700**
BOB-TRTL	BOB with trinocular head, transmitted light	**$ 24,200**
BOB-TRTL2	BOB with trinocular head, dual transmitted light	**$ 25,600**

STEP 2

CHOOSE YOUR OBJECTIVE(s)

The BOB uses a standard Olympus 2-position nosepiece. You can
use your own objectives or select up to 2 from the choices below.

Objectives highlighted in GREEN are recommended for electrophysiology.

Catalog Number	Description	Price
OBJ-522	4X-UPLFLN4X;U PLAN FLUORITE 4X OBJECTIVE;NA 0.13, WD 17mm	$ 436
OBJ-342	5X-LMPLFLN5X;LWD M PLAN FL 5X OBJECTIVE;NA 0.13, WD 22.5mm	$ 946
OBJ-343	10X-LMPLFLN10X;LWD M PLAN FL 10X OBJECTIVE;NA 0.25, WD 21mm	$ 1,272
OBJ-524	10X-UPLFLN10X2;U PLAN FLUORITE 10X OBJECTIVE;NA 0.3, WD 10mm	$ 779
OBJ-824	10X-UPLSAPO10X2;U PLANS S-APO 10X OBJECTIVE;NA 0.4, WD 3.1mm	$ 2,255
OBJ-525	20X-UPLFLN20X;U PLAN FLUORITE 20X OBJECTIVE;NA 0.5, WD 2.1mm	$ 925
OBJ-585	20X-UMPLFLN20XW;LWD PLAN FLUOR 20X WTR DIPPING OBJ;NA 0.5, WD 3.5mm, IR	$ 1,657
OBJ-766	20X-UAPON20XW340;UAPON 20X WATER 340nm OBJ;NA 0.7, WD 0.35mm	$ 4,222
OBJ-825	20X-UPLSAPO20X;U PLAN S-APO 20X OBJECTIVE;NA 0.75, WD 0.6mm	$ 2,435
OBJ-527	40X-UPLFLN40X;U PLAN FLUORITE 40X OBJECTIVE;NA 0.75, WD 0.51mm	$ 1,012
OBJ-587	40X-LUMPLFLN40X/W;U M PLAN FLN 40X/W OBJ;NA 0.8, WD 3.3mm, IR, ECO	$ 2,556
OBJ-769	40X-UAPON40XW340;UAPON 40X WATER OBJ;NA 1.15, WD 0.25mm, W/CC, BFP1	$ 4,222
OBJ-350	50X-LMPLFLN50X;LWD M PLAN FL 50X OBJECTIVE;NA 0.5, WD 10.6mm	$ 2,706
OBJ-592	60X-LUMPLFLN60X/W;U M PLAN FLN 60X/W OBJ;NA 1.0, WD 2.0mm, IR, ECO	$ 3,007
OBJ-672	60X-LUMFLN60X/W;NA 1.1, WD 1.5mm, 25 ANGLE, IR.CC, ECO	$ 9,267
OBJ-832	60X-UPLSAPO60XO;U PLAN S-APO 60X OIL OBJ;NA 1.35, WD 0.15mm, BFP1	$ 5,089
OBJ-893	60X-UPLSAPO60XW;U PLAN S-APO 60X W OBJ;NA 1.2, WD 0.28mm, W/CC 0.13-0.21	$ 9,505

STEP 3

For models with **TL** in the part number, choose a condenser. For DIC models,
select the condenser that matches the highest power of your selected objectives.

Catalog Number	Description	Price
OCC	Oblique coherent condenser	$ 2,300
DIC-40X	DIC condenser for BOB with 40x objective	$ 5,960
DIC-40XIR	DIC condenser for BOB with 40x objective and IR	$ 7,810
DIC-60X	DIC condenser for BOB with 60x objective	$ 6,460
DIC-60XIR	DIC condenser for BOB with 60x objective and IR	$ 8,270

STEP 4

For models with **FL** in the part number, choose a filter cube(s) and a light source.

FILTER CUBES

Catalog Number	Description	Price
CUBE-GFP	Filter Cube - GFP	**$ 1,220**
CUBE-CY3	Filter Cube - CY3	**$ 1,220**
CUBE-YFP	Filter Cube - YFP	**$ 1,220**
CUBE-DAPI	Filter Cube - DAPI	**$ 1,220**
CUBE-A635	Filter Cube - ALEXA 635	**$ 1,220**

LIGHT SOURCES

Catalog Number	Description	Price
HPX-L5	Lambda HPX-L5 High powered LED light source	**$ 5,650**
LS-OF30	Lambda LS with 300 Watt **ozone free** lamp	**$ 5,550**
LB-421	Lambda 421 Optical Beam Combiner and controller	**$ 9,715**
LB-OBC	Lambda OBC Optical Beam Combiner	**Contact Sutter**
FLED-BOB	Lambda FLED for BOB	**$ 2,860**
FLED-DC-BOB	Dual Channel Lambda FLED for BOB	**$ 5,825**
LG-BOB	Light guide adapter	**$ 580**

STEP 5

Select a stage and translator as needed.
If you are planning on using our free Multi-Link Software, you
will need to select a stage or translator with the MPC-200 controller

MOTORIZED LARGE PLATFORM STAGE

Catalog Number	Description	Price
MPC-88[1]	Moving platform stage plate with motorized gantry supports, MPC-200 controller and ROE, cables and manual	**$ 13,615**
MPC-88-M6[1]	Same as **MPC-88** except with M6 tapped holes	**$ 13,615**
MPB-88[1]	Moving platform stage plate with motorized gantry supports, BOB controller, cables and manual	**$ 11,025**
MPB-88-M6[1]	Same as **MPB-88** except with M6 tapped holes	**$ 11,025**
MP-88[1]	Moving platform stage plate with motorized gantry supports, MP-285 controller and ROE, cables and manual	**$ 12,415**
MP-88-M6[1]	Same as **MP-88** except with M6 tapped holes	**$ 12,415**

[1] *Please specify chamber type when ordering*

MOTORIZED TRANSLATOR AND STANDS

Catalog Number	Description	Price
MT-2000-BOB	Motorized translator with MP-285 controller, ROE, and stands	**$ 11,580**
MT-2200-BOB	Motorized translator with MPC-200 controller, ROE, and stands	**$ 12,025**
MT-2800-BOB	Motorized translator with BOB controller, ROE, and stands	**$ 11,580**

MOTORIZED TRANSLATOR AND FIXED PLATFORM STAGE

Catalog Number	Description	Price

MT-2088-BOB	Motorized translator with MP-285 controller, ROE, and fixed platform stage	**$ 12,700**
MT-2288-BOB	Motorized translator with MPC-200 controller, ROE, and fixed platform stage	**$ 13,255**
MT-2888-BOB	Motorized translator with BOB controller, ROE, and fixed platform stage	**$ 11,700**

MOTORIZED TRANSLATOR ONLY (no stands or platform)

Catalog Number	Description	Price
MT-800-BOB	Motorized translator with MP-285 controller and ROE	**$ 9,380**
MT-820-BOB	Motorized translator with MPC-200 controller and ROE	**$ 9,930**
MT-880-BOB	Motorized translator with BOB controller and ROE	**$ 8,380**

STEP 6

Select a camera as needed

CAMERA

Catalog Number	Description	Price
CAM-EL	ELECTRO, Cooled 1.4MP CCD Camera	**$ 4,950**
CAM-PR	PRIME 25B, Back illuminated CMOS Camera	**$ 24,950**
CAM-BSI	PRIME BSI, High-res scientific CMOS Camera	**$ 18,450**

A C C E S S O R I E S
MP-88 / MPB-88 / MPC-88 Chamber inserts

Catalog Number	Description	Price
X040500[2]	Warner Series 20 (round) - aluminum	**$ 117**
X040503[2]	Warner Series 20 (round) - stainless steel	**$ 117**
X040505[2]	Warner Series 20 (octagonal) - aluminum	**$ 117**
X040507[2]	Warner Series 20 (octagonal) - stainless steel	**$ 117**
X040510[2]	50mm round - aluminum	**$ 117**
X040512[2]	50mm round - stainless steel	**$ 117**
X040497[2]	Blank insert - Aluminum	**$ 117**
X040498[2]	Blank insert - stainless Steel	**$ 117**
SI-SLIDE[2]	Insert with slide holder	**$ 117**
SI-PETRI	For petri dish and slides	**$ 329**
SI-W30[2]	Warner Series 30 platform - aluminum	**$ 117**
SI-W30ST[2]	Warner Series 30 platform - stainless steel	**$ 117**
SI-ALA-MS[2]	ALA MS series insert - aluminum	**$ 117**
SI-CUSTOM	Custom stage insert	**$ 361**

[2] *No charge when ordered with MP-88, MPB-88 or MPC-88*

PRODUCT INFORMATION

Download BOB Sales Flyer