

OPTIKA

M I C R O S C O P E S
I T A L Y

High-end upright laboratory microscopes

B-600

B-600B / B-600T / B-600Bph / B-600Tph / B-600Bi / B-600Ti
B-600Biph / B-600Tiph

B-600 Series

High-end upright laboratory microscopes

 **infiniflex™**
optical system

 **IOS™**
objectives



B-600



B-600 Series

With the B-600 series, OPTIKA Microscopes sets a new record in the quality-to-price ratio. The extraordinary characteristics of a series of highly professional microscopes are now accessible for all laboratories, meeting the needs of those who are looking for a prime quality instrument, without having large budgets.

The B-600 series microscopes are instruments specifically designed to be used in a laboratory, where high optical and mechanical quality as well as sturdiness to guarantee longer life are required. The B-600 microscopes have been designed for the best performance in laboratory use. According to the models, two different optical systems are available.

With InfiniFix optical system, the two worlds of infinity-corrected and 160 mm optical system find the way to meet each other.

With this exclusive optical system all InfiniFix models use a true infinity-corrected optical path, implemented with standard 160 mm objectives.



IOS simply means "Infinity Optical System".

All IOS models of B-600 series are equipped with true Infinity Corrected Objectives.



| | |
|-----------|---|
| B-600B | Binocular microscope, planachromatic objectives |
| B-600T | Trinocular microscope, planachromatic objectives |
| B-600Bph | Binocular microscope, planachromatic objectives for phase contrast |
| B-600Tph | Trinocular microscope, planachromatic objectives for phase contrast |
| B-600Bi | Binocular microscope, IOS planachromatic objectives |
| B-600Ti | Trinocular microscope, IOS planachromatic objectives |
| B-600Biph | Binocular microscope, IOS planachromatic objectives for phase contrast |
| B-600Tiph | Trinocular microscope, IOS planachromatic objectives for phase contrast |

B-600T



X-LED⁸™ - Never so bright !

OPTIKA is proud to introduce its own latest LED-powered illumination system. Developed by our R&D dept. it consists of a new combination of LED and optical technology. A new high-efficiency matrix-based LED board works in combination with a special optical lens, which allows to double the intensity of the light generated by the LED itself.

The result is a quantity of light equivalent to the light generated by a normal 100W halogen bulb, but with a colour temperature of 6300K. It means white light instead of the yellow one produced by halogen bulbs.

The electrical consumption (8W only) shows the high efficiency of the system: same light intensity with less than 10% of the consumption of a normal halogen bulb.

Last but not least, the lifetime of our LED: 50.000 hours, instead of 1.500 hours.



B-600 Series - Specifications

Optical system & objectives

The B-600 series microscopes are equipped, depending on the various models, with two different types of infinity optical systems: INFINIFIX™ and IOS™. In both cases the field number of the system is 22 mm. All models in the B-600 series are equipped with plan achromatic objectives. The models with INFINIFIX™ system are provided with plan achromatic objectives corrected to 160mm. The models with IOS™ system are provided with plan achromatic objectives corrected to infinity. Depending on the models, different sets of objectives are included in the package.

Microscope stand

Modern and ergonomic, this stand is made of die-cast aluminium. Macro and micrometric focusing (graduated, 0.002mm) with coaxial controls. Adjustable focusing tension and upper sliding stop.

Head

They are available in binocular and in trinocular version suitable for photography/video applications. Both heads are equipped with interpupillary distance control (51-78 mm) and with dioptic compensation that takes place on the left eyepiece holder tube. EWF10x/22 eyepieces also suitable for people wearing glasses. All heads are 360° rotating and 30° inclined. Additionally, a new 30°-60° ergonomic head is available as an accessory.

Condenser

Two kinds of swing-out condensers are available (depending on the model):

- 0.10/1.20 N.A. for better performances with high magnifications;
- 0.22/0.90 N.A. for better performances with low magnifications (pathology)

Specimen stage

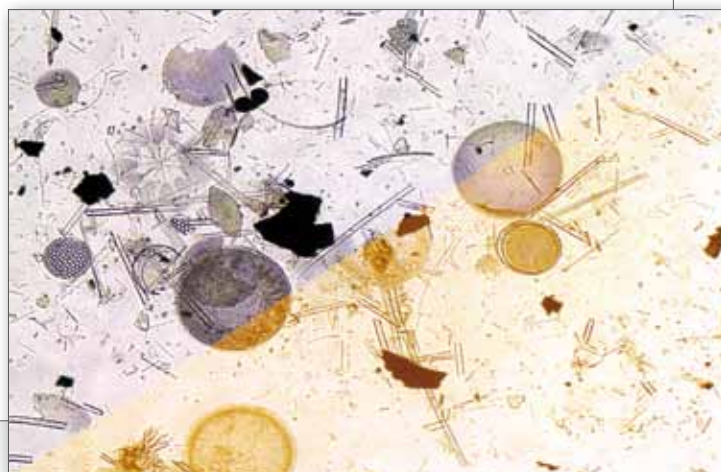
This large-size (175x145mm) stage is fitted with a graduated translation mechanism (double 0.1mm vernier) operated by a rack-and-pinion system with coaxial controls mounted in a comfortable position beneath the specimen stage. The object slide clamp accepts up to two specimens at the same time. The standard rectangular stage may be replaced by a rotating stage for polarized light (optional feature). XY range: 76x51 mm.

Illuminators

The B-600 series is equipped with the strongest illumination systems of the OPTIKA range.

Two kinds of illuminators are available and both systems have been designed according to the Köhler scheme with field diaphragm:

- **12V/50W halogen illuminator.**
Centrable bulb in external case equipped with active cooling system.
- **X-LED8™** System 8W white LED illuminator.
Centrable, in external case. For more information about this revolutionary illumination system, please see the previous page.



X-LED⁸™ vs. Halogen



B-600 Series - Models

B-600Tiph

Quintuple reversed
Planachromatic IOS for phase
contrast 10x, 20x, 40x, 100x (oil)



B-600T

Quintuple reversed
Planachromatic
4x, 10x, 40x, 100x (oil)



Ergo
Head



B-600 Series - Additional models

B-600TiFL

Quintuple reversed
Planachromatic IOS FLUO
4x, 10x, 20x, 40x



B-600POL

Quadruple reversed
with centering mechanism
for all objectives.
Planachromatic IOS POL
4x, 10x, 20x, 60x



B-600MET

Quintuple reversed
Planachromatic IOS MET
5x, 10x, 20x, 50x, 100x (dry)





B-600 Series - Component scheme



B-600 Series - Technical specifications

| Model | Head | Eyepiece | Objectives | Nosepiece | Stage | Focusing | Condenser | Illuminator |
|------------------|--|---------------------------|---|-----------------------|--|---|--|--|
| B-600B | Binocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic 4x, 10x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | Swing-out 1.2 N.A., centrable | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600T | Trinocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic 4x, 10x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | Swing-out 1.2 N.A., centrable | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Bph | Binocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic for phase con- strast 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | -PH condenser 1,25 N.A. - Brightfield swing-out 1,2 N.A. - Both with cen- tering system. | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Tph | Trinocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic for phase con- strast 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | -PH condenser 1,25 N.A. - Brightfield swing-out 1,2 N.A. - Both with cen- tering system. | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Bi | Binocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic IOS 4x, 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | Swing-out 0.90 N.A., centrable | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Ti | Trinocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic IOS 4x, 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | Swing-out 0.90 N.A., centrable | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Biph | Binocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Planachromatic IOS for phase constrast 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | -PH condenser 1,25 N.A. - Brightfield swing-out 0,9 N.A. - Both with cen- tering system. | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |
| B-600Tiph | Trinocular 360° rotating 30° inclined | Wide Field 10X / 22 mm | Plan Achromatic IOS for phase constrast 10x, 20x, 40x, 100x (oil) | Quintuple reversed | 2-layer mechanical sliding stage, 175x145 mm | Coaxial coarse and fine system, with limit stop | -PH condenser 1,25 N.A. - Brightfield swing-out 0,9 N.A. - Both with cen- tering system. | External high efficiency Halogen 50W dichroic bulb or <i>X-LED[®]</i> ™ system |

B-600 Series - Accessories

| | |
|---------|---|
| M-680 | Ergo binocular head 30°-60° |
| M-625 | Eyeiece EWF10x/22mm |
| M-601 | Eyeiece WF15x/16mm |
| M-602 | Eyeiece micrometer EWF10x/22mm |
| M-005 | Micrometric slide, 26x76 mm, range 1 mm, div. 0,01 mm |
| M-603 | Objective planachromatic 4x/0.10 |
| M-604 | Objective planachromatic 10x/0.25 |
| M-605 | Objective planachromatic 20x/0.40 |
| M-606 | Objective planachromatic 40x/0.65 |
| M-689 | Objective planachromatic 60x/0.80 |
| M-607 | Objective planachromatic 100x/1.25 (oil) |
| M-608 | Objective IOS planachromatic 4x/0.10 |
| M-609 | Objective IOS planachromatic 10x/0.25 |
| M-610 | Objective IOS planachromatic 20x/0.40 |
| M-611 | Objective IOS planachromatic 40x/0.65 |
| M-611.1 | Objective IOS planachromatic 60x/0.85 |
| M-612 | Objective IOS planachromatic 100x/1.25 (oil) |
| M-630 | Objective planachromatic for phase contrast 10x/0.25 |
| M-631 | Objective planachromatic for phase contrast 20x/0.40 |
| M-632 | Objective planachromatic for phase contrast 40x/0.65 |
| M-633 | Objective planachromatic for phase contrast 100x/1.25 (oil) |
| M-760 | Objective IOS planachromatic for phase contrast 10x/0.25 |
| M-761 | Objective IOS planachromatic for phase contrast 20x/0.40 |
| M-762 | Objective IOS planachromatic for phase contrast 40x/0.65 |

| | |
|---------|--|
| M-763 | Objective IOS planachromatic for phase contrast 100x/1.25 (oil) |
| M-613 | Polarizing set (filters only) |
| M-615 | Lambda filter for polarizing set |
| M-614 | Rotating table for polarising set |
| M-618 | Darkfield condenser for dry objectives |
| M-616 | Complete phase contrast set with plan obj. 10x, 20x, 40x, 100x (oil) |
| M-616.1 | Set phase contrast, single plan objective 40x |
| M-617 | Complete phase contrast set with plan IOS obj. 10x, 20x, 40x, 100x (oil) |
| M-617.1 | Set phase contrast, single IOS plan objective 40x |
| M-666 | Heating stage, with digital temperature controller |
| M-619 | Photo tube adapter for SLR cameras full frame |
| M-699 | Photo tube adapter for DIGI digital camera series |
| M-620 | CCD camera adapter for 1/3" sensors |
| M-620.1 | CCD camera adapter for 1/2" sensors |
| M-621 | Halogen bulb 6V/30W |
| M-622 | Halogen bulb 12V/50W |
| M-034 | Dust cover type 5 |
| M-975 | Blue filter, 45 mm diameter |
| M-977 | Green filter, 45 mm diameter |
| M-979 | Yellow filter, 45 mm diameter |
| M-989 | Frosted glass filter, 45 mm diameter |
| M-690 | Eyecup (pair) |
| M-173 | APS-C reflex camera adapter |

B-600 Series - Photo-video applications

The B-600 series can be connected to our Optikam and DIGI systems by using an additional accessory (M-699).

For T-mount (reflex) and C-mount cameras, specific adaptors are readily available (according to the adapter chart).



CAMERA ADAPTER CHART FOR TRINOCULAR MODELS

| VC CAMERAS / OPTIKAM CAMERAS | | DIGI | REFLEX APS-C | REFLEX Full frame 35mm |
|---|---|---|---|---|
|  |  |  |  |  |
| C-MOUNT | WITH LENS | | | |
| 1/2 | 1/3 | | T/2* | T/2* |
| M-620.1 | M-620 | M-699 | M-173 M-699 | M-619 |

*T/2 is not supplied by OPTIKA



B-600
Trinocular versions

OPTIKA SRL

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