



Inverted trinocular LED fluorescence microscope, IOS U-PLAN F objectives, 6MP camera with 12" monitor

Observation Method - Transmitted Light	Brightfield	Yes
	Phase contrast (Positive type)	As optional
Observation Method - Incident Light	Fluorescence	Yes
Main Body	Type	Inverted
	Construction material	Aluminum die-cast
Head	Type	Trinocular (Siedentopf)
	Split ratio	100/0 - 50/50
	Inclination	45°
	Interpupillary distance (mm)	50-75
	Dioptric adjustment	On left tube
	Tube inner diameter (mm)	30
Eyepieces	Field number (mm)	22
	Magnification	10x
	Planar type	Yes
	Micrometric scale	As optional
	Diameter of micrometer glass (mm)	26
	High eyepoint (for glass wearers)	Yes
	Rubber cup	Yes
	Retractable protections	Yes
Nosepiece	Positions	Quintuple
	Reversed	Yes
	Bi-directional	Yes
	Rotation on ball bearings	Yes
	Objective thread	RMS
Objectives	Optical system	∞
	Anti-fungus treatment	Yes
	Parfocal distance (mm)	45
	Standard magnifications	100x-400x
	Type	IOS LWD U-PLAN F
		IOS LWD U-PLAN F 10x/0.30, W.D. 7.11 mm
		IOS LWD U-PLAN F 20x/0.45, W.D. 5.91 mm
	IOS LWD U-PLAN F 40x/0.65, W.D. 1.61 mm	

Stage	Type	Fixed + Attachable mechanical stage
	Dimensions (mm)	250x160 (fixed stage) 250x290 (with mechanical stage mounted)
	Moving mechanism	Rack and pinion
	Moving range (mm)	120x80
	Material	Anti-scratch painting
	Glass round insert	Included
	Metal round insert	Included
	Holder for Petri dish (mm)	54 (Included); 38, 65 (As optional)
	Holder for Terasaki plate	96 well (Included)
	Holder for 1 slide	Included
	Holder for 2 slides	As optional
Holder for Utermöhl chamber	As optional	
Condenser - Single Position	Type	Abbe
	Removable	Yes
	Numerical aperture (N.A.)	0.30
	Diaphragms	Iris
	Long working distance	Yes
	Working distance (for LWD) (mm)	72
	Extendable working distance (for LWD) (mm)	up to 150
Focusing System	Type	Coaxial coarse & fine
	Fine total travel (per single rotation) (mm)	0.2
	Fine graduations	100
	Fine resolution (µm)	2
	Upper stop to prevent contact	Yes
	Adjustable tension	Yes
Transmitted Illumination	Type	X-LED
	X-LED type	X-LED8
	Light source power (W)	8
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Temperature (K)	6,300
	Max. required power (W)	13
Power Supply	Type	External
	Microscope connector	Jack, 2.1 mm
	Power plug type	Multi-plug (EU, UK, US)
	Input voltage	100/240 Vac, 50/60 Hz
	Output voltage	12 Vdc 7 A
Accessories Included	Dust cover	Yes
	Allen wrench	Yes
	User Manual	Digital version (downloadable)
Additional Information		Metallic interchangeable inserts for slides, Petri dishes, Terasaki, multi-Well plates (as optional).
Product Dimensions	Height (mm)	625
	Width (mm)	365
	Depth (mm)	540
Product Weight	(kg)	13.5
Fluorescence Attachment	Number of LED Cubes	Up to 4
	BLUE LED Cube (Optional)	LED Emission: 460 nm. Excitation: 455 - 495 nm; Dichroic: 500 nm; Emission: 510LP nm
	BLUE BANDPASS LED Cube (Optional)	LED Emission: 460 nm. Excitation: 455 - 495 nm; Dichroic: 500 nm; Emission: 518-542 nm

GREEN LED Cube (Optional)	LED Emission: 523 nm. Excitation: 510 - 550 nm; Dichroic: 570 nm; Emission: 575LP nm
GREEN BANDPASS LED Cube (Optional)	LED Emission: 523 nm. Excitation: 510 - 550 nm; Dichroic: 570 nm; Emission: 585-625 nm
UV LED Cube (Optional)	LED Emission: 365 nm. Excitation: 325 - 375 nm; Dichroic: 415 nm; Emission: 435LP nm
UV BANDPASS LED Cube (Optional)	LED Emission: 365 nm. Excitation: 340 - 390 nm; Dichroic: 405 nm; Emission: 420-470 nm
V LED Cube (Optional)	LED Emission: 405 nm. Excitation: 390 - 420 nm; Dichroic: 440 nm; Emission: 450LP nm
RED1 LED Cube (Optional)	LED Emission: 623 nm. Excitation: 590 - 650 nm; Dichroic: 660 nm; Emission: 665LP nm
RED2 LED Cube (Optional)	LED Emission: 623 nm. Excitation: 595 - 645 nm; Dichroic: 655 nm; Emission: 665-715 nm
DEEP RED LED Cube (Optional)	LED Emission: 660 nm. Excitation: 623 - 678 nm; Dichroic: 685 nm; Emission: 690-750 nm
FAR RED LED Cube (Optional)	LED Emission: 740 nm. Excitation: 720 - 760 nm; Dichroic: 770 nm; Emission: 780LP nm
AMBER LED Cube (Optional)	LED Emission: 590 nm. Excitation: 582 - 603 nm; Dichroic: 610 nm; Emission: 615-645 nm
<i>Contact OPTIKA for other custom LED Fluorescence Cube options</i>	
Filter set selection	Manual
LED source insertion	Manual
Shutter	No
Field diaphragm	No
Aperture diaphragm	No

Fluorescence Light Source	Light source	LED Fluorescence Cube
	Light source power (W)	3.5
	LED wavelength	<i>see LED Fluorescence Cube specs</i>
	Lifetime (hours)	> 65,000
	Brightness control	Yes

Camera specifications	PC Camera resolution (MP)	6.3
	USB Signal output	USB.3.0
	Sensor Technology	CMOS
	Rolling Shutter	Yes
	Frame rate other resolution (fps)	38@1536x1024
	Dynamic range (dB)	66.8
	G sensitivity	425mV at 1/30s
	Dark Signal	0.15mV at 1/30s
	ADC conversion	8 Bit - 12Bit
	Color Depth	1, 4, 8, 24 Bit
	Exposure time	0.1 msec - 15 sec
	Binning	1x1; 2x2
	IR filter	Yes
	IR filter range (nm)	380-650 (IR CUT)
	Camera Power	PC USB
	C-Mount	Yes
	Dimensions (mm)	68 x 68 x 46
	Weight (Kg)	0.265

HDMI Monitor	Display size	12"
	Display resolution	1920x1080
	Input ports	HDMI
Digital accessories	Calibration slide	Yes
	Wireless Mouse	Yes
	Wireless Keyboard	Yes
Operating System	OS	Windows 10 (64Bit)
Software	SW	Optika ProView Image Analysis for fluorescence
Environment specifications	Working Temperature	-10°C up to +50°C
	Storage Temperature	-20°C up to +60°C
	Relative Humidity	30% to 80%
	Storage Humidity	10% to 60%