

STALWART

Monocular Zoom Microscope STM-1080 Series



STM-1080A



STM-1080B



STM-1080C

Introduction

STM-1080 Series Monocular Zoom microscopes adopt apochromatic parallel optical imaging system and provide high resolution and sharp stereoscopic images. This series microscopes are designed for the applications in the fields of machine vision, industrial inspection and scientific research. Modularization product portfolio and excellent optical performance make them a better choice in these areas.

Features

- Comfortable operation with updated and ergonomic design;
- LED light illumination, save energy and long working life;
- Compact and flexible, ideally suited for desktop, laboratory worktable.

Specification

Item	Specification	STM-1080 A	STM-1080 B	STM-1080 C
Optical System	Infinite apochromatic parallel optical system	Standard	Standard	Standard
Zoom Lens	Optical zoom magnification: 0.6×-5.0×	Standard	Standard	Standard
Zoom ratio	1:8.3	Standard	Standard	Standard
Viewing head	Monocular Viewing head with 10×/18mm, 15×/12mm, 20×/11mm eyepiece, Φ23.2mm	Optional	Optional	Optional
90° Prism	Used to turn the angle of camera or objective, so as to short the size	Optional	Optional	Optional
Mounting Size	Φ40mm	Standard	Standard	Standard
Mounting Adapter	Mounting Adapter (39.6 to 45mm), used to connect the STM-1080A to 45mm focus arm	Optional	Optional	Optional
	Mounting Adapter (39.6 to 50mm), used to connect the STM-1080A to 50mm focus arm	Optional	Optional	Optional
LCD Digital Camera	SLC-520 digital camera with HDMI and WIFI output, can capture 2.0MP pictures, videos and do measurement, control with mouse; 11.6 inch LCD screen, resolution 1920*1080	Optional	Optional	Optional
	SLC-520AF Auto focus digital camera with HDMI and WIFI output, can capture 2.0MP pictures, videos and do measurement, control with mouse; 11.6 inch LCD screen, resolution 1920*1080	Optional	Optional	Optional
	SLC-550 digital camera with HDMI and WIFI output, can capture 5.0MP pictures, videos and do measurement, control with mouse; 11.6 inch LCD screen, resolution 1920*1080.	Optional	Optional	Optional

Specification

	SLC-550AF Auto focus digital camera with HDMI and WIFI output, can capture 5.0MP pictures, videos and do measurement, control with mouse; 11.6 inch LCD screen, resolution 1920*1080.	Optional	Optional	Optional
C-mount Adapter	0.3× C-mount adapter	Optional	Optional	Optional
	0.4× C-mount adapter	Optional	Optional	Optional
	0.5× C-mount adapter	Standard	Standard	Standard
	0.67× C-mount adapter	Optional	Optional	Optional
	1× C-mount adapter	Optional	Optional	Optional
	1.5× C-mount adapter	Optional	Optional	Optional
	2× C-mount adapter	Optional	Optional	Optional
	3× C-mount adapter	Optional	Optional	Optional
Auxiliary Lens	0.3× /WD: 270mm	Optional	Optional	Optional
	0.5× / WD: 160mm	Optional	Optional	Optional
	0.6× / WD: 130mm	Optional	Optional	Optional
	1× / WD: 88mm	Standard	Standard	Standard
	1.5× / WD: 52mm	Optional	Optional	Optional
	2× / WD: 39mm	Optional	Optional	Optional
Infinite LWD Plan Achromatic Metallurgical Objective Lens	5×, NA: 0.12, WD: 26.1mm	Optional	Optional	Optional
	10×, NA: 0.25, WD: 20.2mm	Optional	Optional	Optional
	20×, NA: 0.40, WD: 8.8mm	Optional	Optional	Optional
	40×, NA: 0.6, WD: 3.98mm	Optional	Optional	Optional
	50×, NA: 0.70, WD: 3.68mm	Optional	Optional	Optional
	v60×, NA: 0.75, WD: 1.22mm	Optional	Optional	Optional
	80×, NA: 0.80, WD: 1.25mm	Optional	Optional	Optional
	100×, NA: 0.85, WD: 0.4mm	Optional	Optional	Optional
Infinite LWD Plan Apochromatic Metallurgical Objective	5×, NA: 0.13, WD: 44.5mm	Optional	Optional	Optional
	10×, NA: 0.28, WD: 34mm	Optional	Optional	Optional
	20×, NA: 0.29, WD: 31mm	Optional	Optional	Optional
	50×, NA: 0.42, WD: 20.1mm	Optional	Optional	Optional
Coaxial light Device	Coaxial Device, light input port Φ 11mm (does not include light source)	Optional	Optional	Optional
	Coaxial point light source: 3W LED, 5500K, brightness adjustable	Optional	Optional	Optional

Specification

	Polarized Coaxial Device, light input port $\Phi 11\text{mm}$ (does not include light source)	Optional	Optional	Optional
Ring Light	SAL-48A LED Ring light, brightness adjustable	Optional	Standard	Standard
	Polarized LED Ring light, brightness adjustable	Optional	Optional	Optional
Other Accessories	Metallurgical objective adapter (used to connect metallurgical objectives onto the zoom body)	Optional	Optional	Optional
	Triple Nosepiece for metallurgical objectives	Optional	Optional	Optional
	Quadruple Nosepiece for metallurgical objectives	Optional	Optional	Optional
	SSL-3B LED light source with dual goose neck light guide, 6.5W	Optional	Optional	Optional
	SMS-302 X-Y moving stage	Optional	Optional	Optional
	SSL2-150A-1 Cold light source with Single Light Guide, 150W	Optional	Optional	Optional
	SSL2-150A-2 Cold light source with Dual Light Guide, 150W	Optional	Optional	Optional
	SSL2-150A-O Cold light source with Annular Ring Light Guide, 150W	Optional	Optional	Optional
Stand and focus arm	SA1 Pillar type column plain stand with coarse focus arm	Optional	Optional	Optional
	SA2 Pillar type column plain stand with coarse and fine focus arm	Optional	Optional	Standard
	SA3 Square type column plain stand with coarse and fine focus arm	Optional	Optional	Optional
	SA4 Square type column plain stand with coarse and fine focus arm, transmitted 10W LED illumination	Optional	Optional	Optional
	Sa5 multi-angle column plain stand with coarse focus arm	Optional	Optional	Optional

Specification

	Polarized Coaxial Device, light input port Φ 11mm (does not include light source)	Optional	Optional	Optional
Ring Light	SAL-48A LED Ring light, brightness adjustable	Optional	Standard	Standard
	Polarized LED Ring light, brightness adjustable	Optional	Optional	Optional
Other Accessories	Metallurgical objective adapter (used to connect metallurgical objectives onto the zoom body)	Optional	Optional	Optional
	Triple Nosepiece for metallurgical objectives	Optional	Optional	Optional
	Quadruple Nosepiece for metallurgical objectives	Optional	Optional	Optional
	SSL-3B LED light source with dual goose neck light guide, 6.5W	Optional	Optional	Optional
	SMS-302 X-Y moving stage	Optional	Optional	Optional
	SSL2-150A-1 Cold light source with Single Light Guide, 150W	Optional	Optional	Optional
	SSL2-150A-2 Cold light source with Dual Light Guide, 150W	Optional	Optional	Optional
	SSL2-150A-O Cold light source with Annular Ring Light Guide, 150W	Optional	Optional	Optional
Stand and focus arm	SA1 Pillar type column plain stand with coarse focus arm	Optional	Optional	Optional
	SA2 Pillar type column plain stand with coarse and fine focus arm	Optional	Optional	Standard
	SA3 Square type column plain stand with coarse and fine focus arm	Optional	Optional	Optional
	SA4 Square type column plain stand with coarse and fine focus arm, transmitted 10W LED illumination	Optional	Optional	Optional
	SA5 multi-angle column plain stand with coarse focus arm	Optional	Optional	Optional

Accessories

Auxiliary Objectives	CCD C-mount Adapter				
		0.3×	0.4×	0.5×	0.67×
Standard 1.0×/ WD:86mm	Total Mag	0.18×-1.5×	0.24×-2.0×	0.3×-2.5×	0.4×-3.35×
	FOV (mm)	26×20-3×2.0	20×15-2×1.8	16×12-1.9×1.4	12×9-1.43×1.07
0.3×/ WD:270mm	Total Mag	0.05×-0.45×	0.07×-0.6×	0.09×-0.75×	0.12×-1.0×
	FOV (mm)	96×72-10.6×8	68×51-8×6	53×40-6.4×4.8	40×30-4.8×3.6
0.5× /WD:160mm	Total Mag.	0.09×-0.75×	0.12×-1×	0.15×-1.25×	0.201×-1.68×
	FOV (mm)	53×40-6.4×4.8	40×30-4.8×3.6	32×24-3.8×2.8	23.88×17.9-
					2.85×2.14
0.6×/ WD:130mm	Total Mag	0.22×-0.9×	0.144×-1.2×	0.18×-1.5×	0.24×-2.0×
	FOV (mm)	22×16-.3 ×4	33×25-4×3	26×20-3×2	20×15-2.4×1.8
1.5×/ WD:50mm	Total Mag	0.27×-2.25×	0.36×-3×	0.45×-3.75×	0.6×-5.0×
	FOV (mm)	18×13-2×1.6	13×10-1.6×1.2	11×8-1.3×0.9	8×6-0.9×0.7
2.0×/ WD:39mm	Total Mag.	0.36×-3×	0.48×-4×	0.6×-5.0×	0.8×-6.7×
	FOV (mm)	13×10-1.6×1.2	10×7.5-1.2×0.9	8×6-0.9×0.7	6×4.5-0.7×0.54

Accessories

Auxiliary Objectives	CCD C-mount Adapter				
		1.0×	1.5×	2.0×	3.0×
Standard 1.0×/ WD:86mm	Total Mag	0.6-5.0×	0.9×-7.5×	1.2× -10.0×	1.8×-15×
	FOV (mm)	8×6-0.9×0.7	5×4-0.6×0.5	4×3-0.5×0.36	2.6×2-0.3×0.2
0.3×/ WD:270mm	Total Mag	0.18×-1.5×	0.27×-2.25×	0.36×-3×	0.54×-4.5×
	FOV (mm)	26×20-3.2×2.4	18×13-2×1.6	13×10-1.6×1.2	9×6.6-1.1×0.8
0.5× /WD:160mm	Total Mag.	0.3×-2.5×	0.45×-3.75×	0.6×-5×	0.9×-7.5×
	FOV (mm)	16×12-1.9×1.4	11×8-1.3×0.9	8×6-0.9×0.7	5×4-0.6×0.5
0.6×/ WD:130mm	Total Mag	0.36×-3×	0.54×-4.5×	0.72×-6×	1.08×-9×
	FOV (mm)	13×10-1.6×1.2	9×6.6-1.1×0.8	6.6×51-0.8×0.6	4.4×3-0.5×0.4
1.5×/ WD:50mm	Total Mag	0.9×-7.5×	1.35×-11.25×	1.8×-15×	2.7×-22.5×
	FOV (mm)	5×4-0.6×0.5	3.5×2.6-0.4×0.3	2.6×2-0.3×0.24	1.7×1.3-0.2×0.1
2.0×/ WD:39mm	Total Mag.	1.2×-10×	1.8×-15×	2.4×-20×	3.6×-30×
	FOV (mm)	4×3-0.5×0.36	2.6×2-0.3×0.2	2×1.5-0.2×0.18	1.3×1-0.16×0.12

Accessories

System diagram



CCD C-mount adaptor



STM-1080A with coaxial device and triple nosepiece



90° Prism



STM-1080A with coaxial device



STM-1080LCD1/2/3/4



Auxiliary Objective

Accessories



Polarized LED ring light
(back)



Polarized LED ring light



Polarized Coaxial Device



Coaxial Device



LED point light for Coaxial
Device



BMS-302 X-Y stage
Device



STM-1080B with LCD
screen holder



LCD screen holder



90° Prism on objective

Accessories



90° Prism on objective



Focus arm with camera holder(Up)



Focus arm with camera holder(Down)



BSL-3B



BSL2-150A



Double Rigid Fiber



Single Rigid Fiber

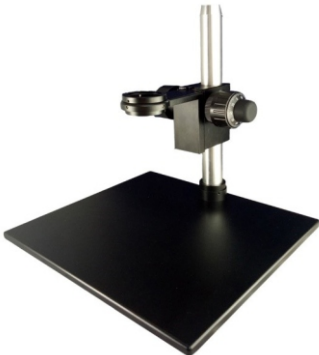


Ring Flexible Fiber



BA1 Stand

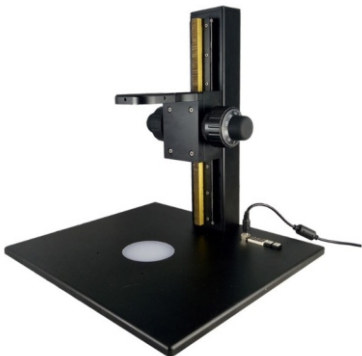
Accessories



SA2 Stand



SA3 Stand



SA4 Stand



SA5 Stand(left)



SA5 Stand(horizontal)



Double Rigid Fiber