

**ken-a-vision**<sup>®</sup>  
KNOWLEDGE THROUGH VISION

# Comprehensive Scope 2 T-19001C Series Technical Specifications

## Model Number

T-19011C

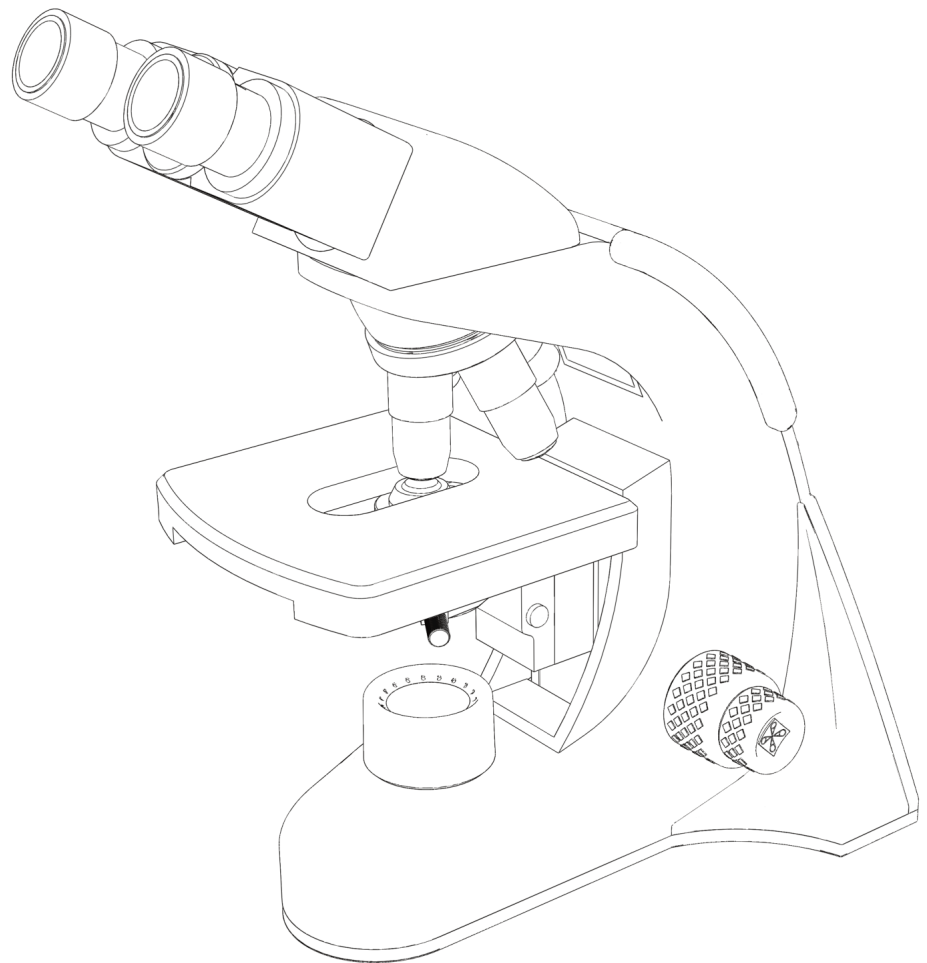
T-19541C

T-19021C

T-19641C

T-19031C

T-19041C





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**Comprehensive  
Scope 2  
Monocular Head  
Model # T-19011C / T-19011C-230**

**Detailed Specifications (October 2009)**

Head	Eyepieces	1 – WF10x 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage
	Eyepiece tubes	1 – Variable adjustment $\pm 0.20x$ for varied eye strengths.
	Monocular View with 30°	1 -- 30° Angle 360° rotation attached eyepieces comfortable student or teacher viewing
Frame	Aluminum Single Cast body	“Y” shape base for ideal research application
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport are integrated into the body of the unit.
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply
	<b>“Table Guard” protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surrounding surfaces
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control
	<b>Power</b>	Low voltage external power supply 120 ~ 240V $\pm 500mA$ (stored in frame) detachable
Optics	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotation
	Objectives	3 – lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen),
Stage	Fixed Plain Stage w/Side	12cm x12 cm x .7cm modular attachment to frame 2 spring loaded clips for slides
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus knobs; Fine focusing scale value 0.002mm
Optional upgrades	Viewing Head	Dual View with 30° incline opposing view
		Compensation Free Binocular Head
		Compensation Free Trinocular Head
		Monocular Digital Head
		Compensation Free Digital Binocular Head
	Eyeiece	WF 16x, WF 20x
	Achromatic Objective	20x, 60x(S), 100x(S) Oil
	Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
	Semi-Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
	Illumination	Halogen bulb 6v/20W, Adjustable Brightness
Packing	Boxing	Two inner cartons in one outer carton
	Protective Cover	Durable Clear Dust cover with Ken-A-Vision logo
Certificates	Patents	Multiple Patents Pending
	Quality Certificates	ISO:9001 --2000
	Local Certificates	CE, CSA, RoHS
	Warranty Guarantee	10 Years against manufacturing faults



**Comprehensive  
Scope 2  
Dual View Head  
Model # T-19021C / T-19021C-230**

**Detailed Specifications (October 2009)**

Head	Eyepieces	2- WF10x 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage
	Eyepiece tubes	1 - Variable adjustment $\pm 0.20x$ for varied eye strengths.
	Dual View with 30° incline opposing view	30° Angle 360° rotation head with 2 eyepieces - comfortable for 2 student or teacher viewing
Frame	Aluminum Single Cast body	"Y" shape base for ideal research application
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport are integrated into the body of the unit.
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply
	<b>"Table Guard" protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surroundings
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control
	<b>Power</b>	Low voltage external power supply 120 ~ 240V $\pm 500mA$ (stored in frame) detachable
Optics	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotation
	Objectives	3 - lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen),
Stage	Fixed Plain Stage w/Side	12cm x12 cm x .7cm modular attachment to frame 2 spring loaded clips for slides
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus knobs; Fine focusing scale value 0.002mm
Optional upgrades	Viewing Head	Monocular Head
		Compensation Free Binocular Head
		Compensation Free Trinocular Head
		Monocular Digital Head
		Compensation Free Digital Binocular Head
	Eyepiece	WF 16x, WF 20x
	Achromatic Objective	20x, 60x(S), 100x(S) Oil
	Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
	Semi-Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
	Illumination	Halogen bulb 6v/20W, Adjustable Brightness
Packing	Boxing	Two inner cartons in one outer carton
	Protective Cover	Durable Clear Dust cover with Ken-A-Vision logo
Certificates	Patents	Multiple Patents Pending
	Quality Certificates	ISO:9001--2000
	Local Certificiates	CE, CSA, RoHS
	Warranty Guarantee	10 Years against manufacturing faults



## Comprehensive

### Scope 2

### Binocular

### Seidentöpf Head

## Model # T-19031C / T-19031C-230

### Detailed Specifications (October 2009)

Head	Eyepieces	2 – WF10x 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage
	Eyepiece tubes	1 – Variable adjustment $\pm 0.20x$ for varied eye strengths.
	Binocular Seidentöpf Head	30° Angle 360° rotation head with 2 eyepieces
Frame	Aluminum Single Cast body	“Y” shape base for ideal research application
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport are integrated into the body of the unit.
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply
	<b>“Table Guard” protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surroundings
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control
	<b>Power</b>	Low voltage external power supply 120 ~ 240V $\pm 500mA$ (stored in frame) detachable
Optics	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotation
	Objectives	3 – lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen),
Stage	Fixed Plain Stage w/Side	12cm x12 cm x .7cm modular attachment to frame 2 spring loaded clips for slides
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus knobs; Fine focusing scale value 0.002mm
Optional upgrades	Viewing Head	Monocular Head
		Dual View with 30° incline opposing view
		Compensation Free Trinocular Head
		Monocular Digital Head
		Compensation Free Digital Binocular Head
	Eyepiece	WF 16x, WF 20x
	Achromatic Objective	20x, 60x(S), 100x(S) Oil
	Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
	Semi-Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
Illumination	Halogen bulb 6v/20W, Adjustable Brightness	
Packing	Boxing	Two inner cartons in one outer carton
	Protective Cover	Durable Clear Dust cover with Ken-A-Vision logo
Certificates	Patents	Multiple Patents Pending
	Quality Certificates	ISO:9001--2000
	Local Certificiates	CE, CSA, RoHS
	Warranty Guarantee	10 Years against manufacturing faults



**Comprehensive  
Scope 2  
Trinocular  
Seidentöpf Head**

**Model # T-19041C / T-19041C-230**

**Detailed Specifications (April 2010)**

Head	Eyepieces	23– WF10x 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage
	Eyepiece tubes	1 – Variable adjustment $\pm 0.20x$ for varied eye strengths.
	Trinocular Seidentöpf Head	30° Angle 360° rotation head with 3 eyepieces
Frame	Aluminum Single Cast body	“Y” shape base for ideal research application
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport are integrated into the body of the unit.
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply
	<b>“Table Guard” protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surroundings
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control
	<b>Power</b>	Low voltage external power supply 120 ~ 240V $\pm 500mA$ (stored in frame) detachable
Optics	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotation
	Objectives	3 – lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen),
Stage	Fixed Plain Stage w/Side	12cm x12 cm x .7cm modular attachment to frame 2 spring loaded clips for slides
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus
Optional upgrades	Viewing Head	Monocular Head
		Dual View with 30° incline opposing view
		Compensation Free Trinocular Head
		Monocular Digital Head
	Eyepiece	Compensation Free Digital Binocular Head
		WF 16x, WF 20x
		20x, 60x(S), 100x(S) Oil
		4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
		4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil
Illumination	Halogen bulb 6v/20W, Adjustable Brightness	
Packing	Boxing	Two inner cartons in one outer carton
	Protective Cover	Durable Clear Dust cover with Ken-A-Vision logo
Certificates	Patents	Multiple Patents Pending
	Quality Certificates	ISO:9001--2000
	Local Certificiates	CE, CSA, RoHS
	Warranty Guarantee	10 Years against manufacturing faults

**Comprehensive Scope 2**  
**Digital Monocular Head**  
**Model # T-19541C / T-19541C-230**



**Detailed Specifications (October 2009)**

Head	Eyepieces	1- WF10x 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage	
	Eyepiece tubes	1 - Variable adjustment $\pm 0.20x$ for varied eye strengths.	
Camera	Integrated Top mounted Digital	1 -- 30° Angle 360° rotation attached eyepieces comfortable student or teacher viewing with	
	Mega-Pixel Camera	1.3 (1,300,000) pixel CMOS camera array, color corrected for microscopic application, USB 2.0 (USB 1.1 backward compliant) field corrected to match eyepiece view	
	Compatibility	UVC (Universal Video Class) for true plug and play compatibility with Windows, Macintosh and Linux OS systems	
	Power	Low power supplied by USB connection of computer $\pm 4.0$ Volts 250mA light indicator when on at top of unit	
	Built-in Cable	Mounted into monocular, on head; up-gradable for different camera solutions USB 2.0; 1.8m A:B connector style	
Frame	Aluminum Single Cast body	"Y" shape base for ideal research application	
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport and storage are integrated into the body of the unit.	
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply	
	<b>"Table Guard" protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surroundings	
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control	
	<b>Power Microscope</b>	Microscope Illumination is Low voltage external power supply 120 ~ 240V $\pm 500$ mA (stored in frame) detachable	
	Power Camera	5VDC, 180mA From Computer USB PORT	
Optics	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotator	
	Objectives	4 - lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen), Achromat 100x N.A. 1.25 oil immersion (with built-in spring action tip to avoid crushing of specimen)	
Stage	Mechanical Stage	Coated 130x 120mm, coaxial lower position separate knobs for movement in x and y direction (30 and 80mm) Scaled at 0.1mm on a vernier scale, locking screw, (stage stop) which limits the vertical hub of the stage, protecting samples and objectives	
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus knobs; Fine focusing scale value 0.002mm	
Optional upgrades	Viewing Head	Dual View with 30° incline opposing view Monocular Digital Head Compensation Free Binocular Head Compensation Free Trinocular Head Compensation Free Digital Binocular Head	
	Eyepiece	WF16x, WF20x	
	Achromatic Objective	20x, 60x(S), 100x(S) Oil	
	Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil	
	Semi-Plan Objective	4x, 10x, 20x, 40x(S), 60x(S), 100x(S) Oil	
	Illumination	Halogen bulb 6v/20W, Adjustable Brightness	
	Packing	Boxing	Two inner cartons in one outer carton
	Protective Cover	Durable Clear Dust cover with KAV logo	
Certificates	Patents	Multiple Patents Pending	
	Quality Certificates	ISO:9001--2000	
	Local Certificates	CE, CSA, RoHS	
	Warranty Guarantee	10 Years against manufacturing faults	
Software	Applied Vision 4 Software	Cross Platform MSI push technology for installation from a server cross platform WIN, MAC, LINUX, NET BOOK approved, with multi language support, measure, compare, capture, amalgamate render, draw, Interactive White Board Compliant.	



## Comprehensive Scope 2 Digital Binocular Head

**Model # T-19641C / T-19641C-230**



### Detailed Specifications (October 2009)

Head	Eyepieces	2 – WF10X 19mm eyepiece with built-in coating for humidity and poor climate; 1 with pointer; all fixed to avoid loss and damage	
	Eyepiece tubes	1 – Variable adjustment $\pm 0.20x$ for varied eye strengths.	
Camera	Integrated Top mounted Digital	1 -- 30° Angle 360° rotation attached eyepieces comfortable student or teacher viewing with	
	Mega-Pixel Camera	1.3 (1,300,000) pixel CMOS camera array, color corrected for microscopic application, USB 2.0 (USB 1.1 backward compliant) field corrected to match eyepiece view	
	Compatibility	UVC (Universal Video Class) for true plug and play compatibility with Windows, Macintosh and Linux OS systems	
	Power	Low power supplied by USB connection of computer $\pm 4.0$ Volts 250mA light indicator when on at top of unit	
	Built-in	Mounted into binocular, on head; up-gradable for different camera solutions	
Frame	Cable	USB 2.0; 1.8m A:B connector style	
	Aluminum Single Cast body	"Y" shape base for ideal research application	
	<b>Integrated Stow and Go Handle™ handle</b>	Retractable Handle for transport and storage are integrated into the body of the unit.	
	<b>Integrated storage compartment</b>	Storage compartment with built-in receptacle for the external power supply	
	<b>"Table Guard" protection base</b>	Base outlined with resilient polymer to avoid daily damage to the Microscope or the surroundings	
	<b>Illumination</b>	Patented Ken-A-Vision LED cool lighting source with very long life (12,000+ hours), on/off switch, and dimmer rheostat. On/off switch and dimmer are separate, dimmer rheostat is low position light control	
	<b>Power Microscope</b>	Microscope Illumination is Low voltage external power supply 120 ~ 240V $\pm 500$ mA (stored in frame) detachable	
Optics	Power Camera	5VDC, 180mA From Computer USB PORT	
	Nose Piece	Reversed 4 hole nose piece with 4 position ball bearing action stop, 360 full rotation	
Stage	Objectives	4 – lead free, humidity and climate protected by special coating; manufactured according to DIN: Achromat 4x N.A. 0.10, Achromat 10x N.A. 0.25, Achromat 40x N.A. 0.65 (with built-in spring action tip to avoid crushing of specimen), Achromat 100x N.A. 1.25 oil immersion	
	Mechanical Stage	Coated 130x 120mm, coaxial lower position separate knobs for movement in x and y direction (30 and 80mm) Scaled at 0.1mm on a vernier scale, locking screw, (stage stop) which limits the vertical hub of the stage, protecting samples and objectives	
	Focus	Low position coaxial focus with left or right hand low drive control; with rotating mechanism and torque adjustment 1 course rotation from minimum to maximum stage height. Fine 0.002mm per unit scale mechanism, rubber grips on both fine and course focus knobs; Fine focusing scale value 0.002mm	
Optional upgrades	Viewing Head	Dual View with 30° incline opposing view	
		Monocular Head	
		Compensation Free Binocular Head	
		Compensation Free Trinocular Head	
		Monocular Digital Head	
		Eyepiece	WF16x, WF20x
		Achromatic Objective	20x, 60xS, 100xS Oil
		Plan Objective	4x, 10x, 20x, 40xS, 60xS, 100xS Oil
		Semi-Plan Objective	4x, 10x, 20x, 40xS, 60xS, 100xS Oil
		Illumination	Halogen bulb 6v/20W, Adjustable Brightness
Packing	Boxing	Two inner cartons in one outer carton	
	Protective Cover	Durable Clear Dust cover with KAV logo	
Certificates	Patents	Multiple Patents Pending	
	Quality Certificates	ISO:9001--2000	
	Local Certificates	CE, CSA, RoHS	
	Warranty Guarantee	10 Years against manufacturing faults	
Software	Applied Vision 4 Software	Cross Platform MSI push technology for installation from a server cross platform WIN, MAC, LINUX, NET BOOK approved, with multi language support, measure, compare, capture, amalgamate render, draw, Interactive White Board Compliant.	

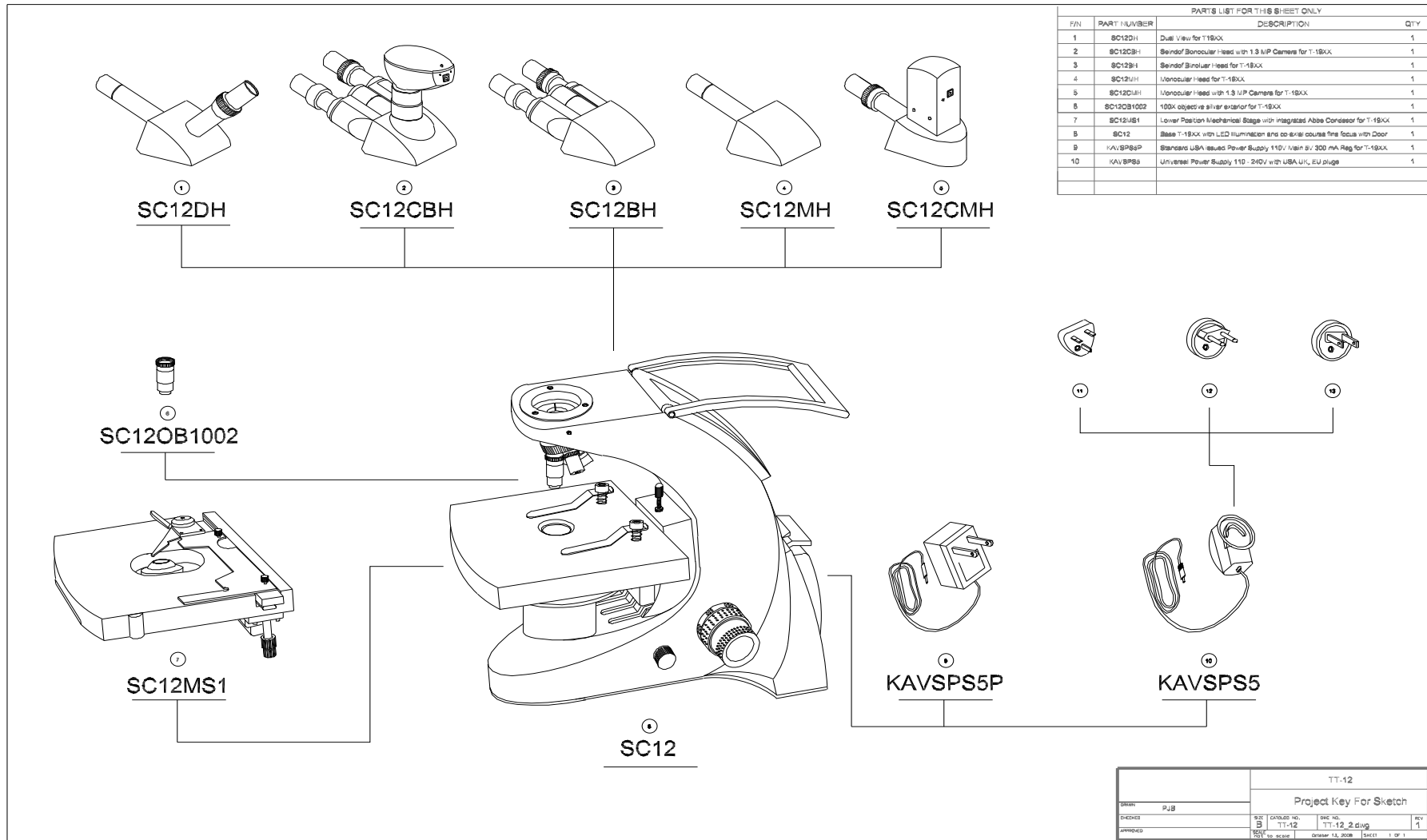


## Comprehensive Scope 2

### T-19001C Series

Product Number	T-19011C	T-19021C	T-19031C	T-19041C	T-19012C	T-19022C	T-19541C	T-19641C	T-19013	T-19023	T-19033	T-19543	T-19643
<b>Stand/Frame</b>													
SC12	Comp 2 Stand with 4 hole nose piece												
SC12M	Comp 2 Mechanical Stage												
SC12DP	Comp 2 4 hole NP w/ upper/lower light												
<b>Standard Features</b>													
	Charger Storage Compartment												
	Stow and Go Handle™												
	Green Battery™												
	Cordless Rechargeable												
	COOL LIGHT™ illumination												
	Increased Range of Focus												
	UPPER LIGHT STALK												
<b>Heads</b>													
SC12MH	Comp 2 Monocular w/ EP												
SC12DH	Comp 2 Opposing 2 EP Oculars												
SC12BH	Comp 2 Binocular Head w/ 2 EP												
SC12TH	Comp 2 Trinocular Head 2 EP												
SC12CMH	Comp 2 Monocular w/ SXGA Cam												
SC12CBH	Comp 2 Binocular Head w/ SXGA Cam												
<b>Stage</b>													
SC12FS	Comp 2 Floating Stage with built in Condenser												
SC12MS	Comp 2 Mechanical Stage with Built in Abbe												
SC12SS	Comp 2 Standard Stage w/ 5 Hole Disc Dia.												
<b>Detail Individual Configurations</b>													
<b>Eyepieces</b>													
SC12EP5	5X												
SC100EP10-19	10X												
SC12EP16	16X												
SC12EP20	20X												
<b>Objectives</b>													
SC12OB2	2X Plan DIN Achromat												
SC12OB4	4X Plan DIN Achromat												
SC12OB10	10X Plan DIN Achromat												
SC12OB40R	40X Plan DIN Achromat 0.65NA												
SC12OB100R	100X DIN Achromat												
<b>Optional</b>													
T-12UG	Comp 2 Mechanical Stage w/ Abbe and 100X DIN Achromat Obj.												
SC12OB4P	4X Plan												
SC12OB10P	10X Plan												
SC12OB20P	20X Plan												
SC12OB40RP	40X Plan												
SC12OB60RP	60X Plan												
SC12OB100RP	100X Plan												
SC12CMH	Monocular Camera Head												
SC12CBH	Binocular Camera Head												

# Comprehensive Scope 2 T-19001C Series





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