🚼 ramona

MCAM ™ Kestrel A-K2850 Behavior

Ramona's Multi-Camera Array Microscope[™] (MCAM) uses an array of micro-cameras to capture an entire well plate in a single snapshot at 18K resolution.

The **Kestrel Behavior System** allows users to simultaneously observe all wells of a standard well plate with 24X higher spatial and temporal resolution than leading competitors. Detailed locomotion kinematics and gross morphology are rapidly quantified as readouts via customized high-speed software to unlock completely new workflows for quantifying organism behavior at high throughput.







Development Partners





High-throughput

Inspired by the tools scientists use everyday, the **Kestrel Screening System** is ideal for assessments in standard SBS 96-well plates.

A Uniform View

Perspective makes peering into many well plates problematic with a single lens. Our array of micro-cameras and wide-field illumination ensure uniform observation across all wells.

Speed Control

Select speeds from 20fps to 340fps depending on the behavioral question being asked — total movement vs escape response, for example.

Custom Workflows

Already have an assay? Integrate it easily in our intuitive software and build upon your lab expertise and our technology.

Kestre 2850 Behavior

Optical	Field Of View	82mm x 118mm
Charactoristics	Live View Stitched View	Continuous I Livo
Characteristics	Desclution	
	Resolution	9.1µm/ pixei
	Numerical Aperture	0.02
	Working Distance	240mm
	Depth of Field	3mm
	Micro-Camera Array Size	6 x 4 = 24 micro-cameras
	Micro-Camera Array Spacing	18mm
	Micro-Camera Field of View	28.5mm x 28.5mm
Concor	Image Sensors	CMOS - RGB Color Monochrome
Sensor	Array Pixel Count	314 Megapixel
Characteristics	Pixel Size	1.1µm
	Bit Depth	8
	Dark Current (Typ.)	5.9 LSB/s
	SNR (Typ.)	35 dB
	Dynamic Range (Typ.)	70.3 dB
	Monochrome Peak OE	92% at 460 nm
	PGR Color Post OF	85% at 520 pm
	Diaital Cala	7.75
	Digital Galia	1.15
	Analog Gain	
	Minimum Exposure	1.5 microseconds
	Maximum Exposure	9 seconds
	Max. Frame Rate (full array)	22 fps (bin1)
	Max. Frame Rate (partial array)	22 fps (bin 1)
Data	Maximum Data Rate	45 Gb/sec 19 Gb/sec
Data	Data Transfer Interface	PCIe 3.0 (x16) (x4)
	Native File Format	.nc (HDF5)
	Exported Image File Format	tiff hmp
	Exported image the Collida	an, omp
	Exported Video File Format	.mp4
	Export Options	By Well ID
	Metadata	.json
	Metadata Options	By Plate Barcode
	Local Storage	4 TB
	Network-Attached Storage	Available Upon Request
Mechanical.	Microscope Orientation	Upright Inverted
Dower & Thermal	Access	Open Enclosed
Power, & Thermai	Vibration Dampening	Integrated
	Dimensions (Typ.)	350mm x 350mm x 450mm
	Weinha (Tan)	18kg
	Weight (IVD)	1 1006
	Stages - Motorized Linear Motion	<3um Reneatability
	Stages - Motorized Linear Motion	Sum Repeatability
	Stages - Motorized Linear Motion	<pre><3µm Repeatability <3µm Repeatability <50µm Unidirectional Accuracy </pre>
	Weight (19).) Stages - Motorized Linear Motion Stage Inserts Accepted Security (Security 19)	c3µm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount
	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID	 <3µm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates
	Weight () yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption	<3µm Repeatability <30µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W
	Weight () yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption	sigm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 4000V 850W
	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power	<3µm Repeatability <3µm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz
	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Power Thermal Monitoring	<3µm Repeatability <30µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 36 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata
	Veignt ()p.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control	<3µm Repeatability <3µm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 36 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module
	Weight (195) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control	<3µm Repeatability <3µm Repeatability <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon RequestRamona + Tokai Hit Stage Top Module
Illumination	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission	- 3gm Repeatability - 3gm Repeatability - 43gm Repeatability - 50gm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8 69 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. /: 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel
Illumination	Weight (yp.) Stage n. Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control	- <3µm Repeatability - <3µm Repeatability - <50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 &96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs)
Illumination	Weight (1yp.) Stage n. Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra	- 3ym Repeatability - 3ym Repeatability - 50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/ . 1.5C. Accuracy Reporting Integrated in Metadata Available Upon Request. Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (IR)
Illumination	Vegrt (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection	- 3ym Repeatability - 3ym Repeatability - 50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (8) + 518 (6) + 620 (R) + 840 (IR) LED Diffuse Illumination Rails
Illumination	weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8 of Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. /-1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (-1400 LEbs) 470 (B) + 518 (G) + 620 (R) + 840 (IR) LED Diffuse Illumination Rails Group Digital Addressable
Illumination	Weight (1yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra	- 3gm Repeatability -3gm Repeatability - 450m Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8 of Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo, F. 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module EED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) LED Diffuse Illumination Rails Group Digital Addressable Vity IR [VV
Illumination	Weight (yp.) Stage n- Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 15C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module ED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (b) + 518 (c) + 620 (b) + 840 (b) LED Diffuse Illumination Rails Group Digital Addressable VIS JR UV
Illumination Operating	weight (1yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux	- 3ym Repeatability - 3ym Repeatability - 50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 4To (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 22.04
Illumination Operating Standards	weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python	-3, m Repeatability -3, m Repeatability -50, m Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8.9 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo, +1.15C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEbs) 470 (B) + 518 (G) + 620 (R) + 840 (IR) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 22.04 Version 3.9
Illumination Operating Standards	Weight (1yp.) Stage a. Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python	-3ym Repeatability -3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8 69 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo, i-1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hil Stage Top Module
Illumination Operating Standards	Verger(1)p.) Stages - Motorized Linear Motion Stage - Motorized Linear Motion Cacepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes	- 3ym Repeatability - 3ym Repeatability - 50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 3.9 Snapshot, Z-Stack, Timelapse, Video
Illumination Operating Standards Operation	weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (B) + 840 (IR) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 22.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence
Illumination Operating Standards Operation	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Observation Ubuntu Linux Python Acquisition Modes Observation Modes	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo, +1.15C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEbs) 470 (B) + 518 (6) + 620 (R) + 840 (IR) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 22.04 Version 3.9 Snapshot, Z-Stack, Timelappe, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positionine
Illumination Operating Standards Operation	weight (yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus Guil	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/ 1.5C. Accuracy Reporting Integrated in Metadata Available Upon Request. Ramon + Tokai Hit Stage Top Module ED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (8) + 518 (6) + 620 (8) + 840 (18) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 22.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simpa and Intuitive Advication
Illumination Operating Standards Operation	Weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus GUI April	-3ym Repeatability -3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (-1400 LEDs) 470 (B) + 513 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Perform Band
Illumination Operating Standards Operation	weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Peffection Control Spectra Ubuntu Linux Python Observation Modes Focus GUI API Outrut Triamer	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable V15 IR UV Version 2.04 Version 3.9 Simple and Intuitive Application Python-Based Simple and Intuitive Application Python-Based
Illumination Operating Standards Operation	Weight (1yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Focus GUI API Output Trigger	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24.8.9 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo, +1.15C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEbs) 470 (B) + 518 (6) + 620 (R) + 840 (IR) LED Diffuse Illumination Raits Group Digital Addressable V15 IR UV Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Insuitve Application Python Based SMA Type @ SV Signal
Illumination Operating Standards Operation	Weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus GUI API Output Trigger	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable V15 IR UV Version 22.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Python-Based SMA Type @ SV Signal
Illumination Operating Standards Operation Software &	weight (1yp.) Stage - Motorized Linear Motion Stage inserts Accepted Formats of Data by Well ID Nominal Power Consumption Mainum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus GUI API Output Trigger	-3,m Repeatability -3,m Repeatability -50,m Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (b) + 518 (c) + 620 (b) + 840 (lR) LED Diffuse Illumination Rails Group Digital Addressable VVS III UV Version 2.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightied, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Python-Based SMA Type @ 57 Signal Custom Gigapixel Frame Grabber
Illumination Operating Standards Operation Software & Firmware	weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python GUI API Output Trigger Image Capture Firmware Cross-Sensor Synchronization	-3,m Repeatability -3,m Repeatability -50,m Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (IR) LED Diffuse Illumination Rails Group Digital Addressable V15 IR UV Version 2.04 Version 3.9 Simple and Intuitive Application Python-Based SMA Type @ 59 Signal - Custom Gigapixel Frame Grabber - -
Illumination Operating Standards Operation Software & Firmware	Weight (yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes GUI API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 2D Image Mosaicing	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/ 1.5C. Accuracy Reporting Integrated in Metadata Available Upon Request. Ramona + Tokai Hit Stage Top Module ED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (C) + 620 (R) + 840 (R) LED Structured Illumination Raits Group Digital Addressable VIS IR UV Version 22.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Python-Based SMA Type @ SV Signal Custom Gigapixel Frame Grabber -4 microseconds Live
Illumination Operating Standards Operation Software & Firmware	Weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus GU Muput Trigger Image Capture Firmware Cross-Sensor Synchronization 20 Image Mosaicing Gigapixel Image Stitching	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 56 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K.Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Inutive Application Python-Based SMA Type @ 5V Signal Custom Gigapizel Frame Grabber -46 microseconds Live Composite Array Frame Output (ziff)
Illumination Operating Standards Operation Software & Firmware	Weight (yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Costs GUI API Output Trigger Image Capture Firmware Cros-S-Sensor Synchronization 2D Image Mosaicing Giapaket Image Stiching Mosaic-Based 2D	-3ym Repeatability -3ym Repeatability -50µm Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (8) + 518 (6) + 620 (8) + 840 (8) V51 [R] UV Version 22.04 Version 3.9 Simple and Intuitive Application Python-Based SMA Type @ 5V Signal Custom Gigapixel Frame Grabber -45 microseconds Live Composite Array Frame Output (Liff) included
Illumination Operating Standards Operation Software & Firmware	Weight (1yp.) Stages - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Beflection Control Spectra Ubuntu Linux Python Focus GU API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 20 Image Massicing Gigpaixel Image Stitching Massicia-Based 2D Neural Network-Based 2D	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 89 Well Plates 400W 850W 120V @ 60Hz 240W @ 55Hz K-Type Thermo.+/-15C Accuracy [Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) +518 (G) +620 (R) +840 (R) LED Diffuse Illumination Raits Group Digital Addressable V15 R UV Version 2.04 Version 3.9 Simple and Intuitive Application Python-Based SMA Type @ Sy Signal
Illumination Operating Standards Operation Software & Firmware	weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Maximum Power Consumption Maximum Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Acquisition Modes Observation Modes Focus GUI API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 2D Image Mosaicing Gigapheli Image Stitching Mosaic-Based 2D High-Speed Video	-3ym Repeatability -3ym Repeatability -SQum Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module
Illumination Operating Standards Operation Software & Firmware	Weight (1yp.) Stage - Motorized Linear Motion Stage nearts Accepted Formats of Data by Well ID Nominal Power Consumption Mainum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Vubuntu Linux Python Acquisition Modes Observation Modes Focus GUI API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 2D Image Mosaicing Gigapixel Image Stitching Mosaic-Based 2D Neural Network-Based 2D High-Speed Video Bin2	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokal Hit Stage Top Module ED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (b) + 518 (c) + 620 (b) + 840 (lR) LED Diffuse Illumination Rails Group Digital Addressable V15 IR UV Version 2.04 Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightied, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Python-Based SNA Type @ SV Signal Custom Gigapite Frame Grabber <6 microseconds Live Composite Array Frame Output (Liff) Included Available Available
Illumination Operating Standards Operation Software & Firmware	Weight (yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Costrol Observation Modes Observation Modes GUI API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 2D Image Mosaicing Gigppxell Image Stitching Mosaic-Based 2D High-Speed Video Bin2	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokal Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (B) + 840 (B) Version 22.04 Version 2.04 Version 3.9 Simple and Intuitive Application Python-Based SMA Type @ 5V Signal Custom Gigapixel Frame Grabber -< -< Variable Available Simple and Intuitive Application Python-Based SMA Type @ 5V Signal Composite Array Frame Output (Aiff) Included Available Available
Illumination Operating Standards Operation Software & Firmware	Weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Ubuntu Linux Python Focus GU API Output Trigger Image Capture Firmware Cross-Sensor Synchronization 20 Image Maxialing Gigapixel Image Stitching Mosai-Based 2D Neural Network-Based 2D High-Speed Video Bin2 Bin4 Control software	-3ym Repeatability -3ym Repeatability -sQum Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/ 1.5C. Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module
Illumination Operating Standards Operation Software & Firmware	weight (1yp.) Stage - Motorized Linear Motion Stage Inserts Accepted Formats of Data by Well ID Nominal Power Consumption Maximum Power Consumption Power Thermal Monitoring Active Thermal Control Transmission Control Spectra Reflection Control Spectra Vubuntu Linux Python Acquisition Modes Observation Modes Focus GU Mutu Trigger Image Capture Firmware Cross-Sensor Synchronization 20 Image Mosaicing Gigapixel Image Stitching Mosaic-Based 2D Neural Network-Based 2D High-Speed Video Bin 4 Control Software	-3,m Repeatability -3,m Repeatability -50,m Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 56 Well Plates 400W 850W 120V @ 60Hz [240V @ 55Hz K.Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokai Hit Stage Top Module ED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VIS IR UV Version 3.9 Snapshot, Z-Stack, Timelapse, Video Brightfield, Darkfield, Fluorescence Global Linear Z-Positioning Simple and Intuitive Application Python-Based SMA Type @ 5V Signal Custom Gigapixel Frame Grabber -46 microseconds Live Composite Array Frame Output (Liff) Included Available 60fps 180fps; 340 fps (partial array) For MCAM Computer For Windows and Linux
Illumination Operating Standards Operation Software & Firmware	Weight (1yp.) Stage - Motorized Linear Motion Stage - Motorized Linear Motion Accepted Formats of Data by Well ID Nominal Power Consumption Mainum Power Consumption Power Thermal Monitoring Active Thermal Control Control Spectra Reflection Control Spectra Vubuntu Linux Python Costrol Spectra Coutput Trigger Ubuntu Trigger Image Capture Firmware Cross-Sensor Synchronization 2D Image Mosaicing Giapavile Image Stiching Mosaic-Based 2D Neural Network-Based 2D High-Speed Video Bin2 Bin4 Control conflware Viewing Software	-3ym Repeatability -3ym Repeatability -50ym Unidirectional Accuracy 160mm x 110mm Universal Mount Standard 24 & 96 Well Plates 400W 850W 120V @ 60Hz 240V @ 55Hz K-Type Thermo. +/- 1.5C Accuracy Reporting Integrated in Metadata Available Upon Request - Ramona + Tokal Hit Stage Top Module LED Structured Illumination Panel Individually Addressable (+1400 LEDs) 470 (B) + 518 (G) + 620 (R) + 840 (R) LED Diffuse Illumination Rails Group Digital Addressable VYS IR UV Version 2.04 Version 3.3 Simple and Intuitive Application Python-Based Simple and Intuitive Application Python-Based SMA Type @ 5V Signal Composite Array Frame Output (Liff) Included Available Available Available Available Available For Windows and Linux dors ramonant's com

Multi-Camera Array Microscope ™

System Field-of-View Over 24 Multi-Well Plate





System Resolution: 9.1 µm per pixel





Example: Parallelized tracking, 96 well-plate





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