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Quotation

Quotation Number: 7760266857

Customer Number: 646174

**LSM 880 NLO Multi Photon 34-Channel GaAsP Spectral Array Detector + FAST Airyscan
Transmitted Light Detector T-PMT**

Includes: 405nm, 458nm, 488nm, 514nm, 594nm, 561nm, and 633nm laser lines

Objectives: Plan-Apo 10x/0.3, 20x/0.8, 40x/1.3 Oil Immersion, 63x/1.4 Oil Immersion

Incubation for Live Cell Imaging

Air Table

ZEN Software with Tiling

3 Channel NDD for MultiPhoton Imaging

LSM 880 NLO

Item	Product ID / Product Description	Quantity
1	000000-1994-956 Scan module LSM 880	1 PC
500	000000-2014-999 Transmitted light detector T-PMT Transmitted light detector T-PMT for detection of DIC, IR-DIC with laser illumination	1 PC
510	000000-1269-455 Switching Mirror R3.5	1 PC

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590	000000-2176-038	1 PC
	Manual ZEN 2.3 f.LSM 710,780,880, Elyra	
	Manual ZEN 2.3 für LSM 710/780/880 / Elyra	
600	000000-2085-478	1 PC
	Laser Rack LSM 880 incl. 633nm Laser	
610	410135-1103-230	1 PC
	ZEN 2.3 system US Hardware License Key	
	ZEN 2.3 system US Hardware License Key	
	Image acquisition and processing under Win 7 / 10 x64.	
	User interface configurable, control of the Carl Zeiss	
	microscope systems and components, extensive	
	acquisition and analysis. CZI image format.	
	The following modules are included:	
	- ZEN Module Measurement	
	- ZEN Module Multi Channel	
	- ZEN Module Panorama	
	- ZEN Module Manual Extended Focus	
	- ZEN Module Image Analysis	
	- ZEN Module Time Lapse	
	- ZEN Module Z Stack	
	- ZEN Module Extended Focus	
	- ZEN Module Autofocus	
	- ZEN Module Colocalisation	
	- ZEN Module Spectral Unmixing (LSM only)	
620	000000-2179-906	1 PC
	Spectral detector 32 ch GaAsP PMT+ 2 ch	
	Spectral detector 32 channels GaAsP PMT plus 2 channels MA-PMT	
630	000000-2074-962	1 PC
	Secondary Beam Splitter filter wheel	
640	000000-2086-081	1 PC
	Laser Argon Multiline 25 mW	
	Laser Argon-Multiline 25mW (D)	
	with electronic control via SW	
650	000000-1410-117	1 PC
	Laser 561nm for LSM 710	
670	000000-2031-918	1 PC
	Laser diode 405nm	
	in standardized laser insert	
680	000000-2014-804	1 PC
	Basic optics UV/NLO	
690	000000-1425-307	1 PC
	AOTF Interface 8 Channel LSM 710	



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720	000000-1583-981	1 PC
	Main beam splitter wheel VIS2 RGBO	
730	000000-2059-641	1 PC
	Electrical Connection Box 240V/120V	
740	000000-2200-458	1 PC
	Bundle RT-System Combi	
	Realtime control electronics combi for systems with external laser (UV/NLO) or combined with Elyra	
750	000000-2205-975	1 PC
	User-PC advanced Z55A Highend	
	Microscopy Workst. Premium, User PC for LSM, ELYRA and CD7, Win 10 (O)	
	HP Z840 Workstation for LSM, ELYRA and CD7 systems	
	- CPU: 2 x Intel® Xeon® E5-2623v3 4-Core 3.0 GHz	
	- Memory 64 GB (4x16) DDR4-2133 MHz ECC registered RAM (12 slots free)	
	- Hard Drives: 4 x 2 TB as 4 TB RAID 10 drive	
	- Nvidia Quadro K2200 4 GB graphics	
	- Dual integrated 10/100/1000 LAN interface	
	- Slim DVD +/- RW recorder for rewriteable media	
	- Rescue kit: (USB stick 16 GB recovery image)	
	- Language Package Windows 10 LTSB Embedded x64 English US	
	- HP KEYBOARD USB US	
	- HP USB Laser Scroll Mouse	
760	410323-0501-000	1 PC
	Solid-State-Drive SSD 512 GB PCIe	
	Solid-State Drive SSD 512 GB PCIe x4	
	for performant handling of large files, e.g. driving detector systems at full bandwidth or processing of large datasets. This requires that the environment variable SWAP points to the SSD drive, thus ZEN creates the swap files there.	
	- Capacity: 512 GB SSD	
	- Maximum Read Transfer Rate: up to 2.15 GB/s	
	- Maximum Write Transfer Rate: up to 1.55 GB/s	
	- Requires one free PCI Express 3.0 x4 slot	
770	410303-3203-000	2 PC
	Memory 32 GB (2x16) DDR4-2133 (Z840)	
	Memory 32 GB (2x16) DDR4-2133 MHz ECC registered RAM (O) consisting of 2 x 16 GB modules	
780	410350-3201-000	1 PC
	Monitor TFT 32" HP Z32	
	Monitor TFT 32" HP Z32 (O)	
	Visible diagonal: 80 cm, 16:9	
	Max. resolution: 3840 x 2160 pixel @ 60 Hz	



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Brightness: 350 cd/m2
Contrast: 1300:1
Viewing angle: horizontal 178 degree, vertical 178 degree
3 x Video input: DisplayPort 1.2, mini DisplayPort 1.2, HDMI 2.0
3 x USB 3.0, 1 x USB 3.1 Type-C
Power consumption: Maximum 185 W, Typical 70 W, Power Saving 0.5 W
Dimensions with stand
(H x W x D): 56.44 cm x 71.45 cm x 24.8 cm
Weight: 12.2 kg (incl. stand)
Ergonomic features: Tilt: -5°to +20°, swivel:90°, height adjustable 12 cm
Certification and compliance: CE, CSA, GS, TÜV, FCC, TCO
Operating voltage: 100-240 V, country-specific power cable

790	410136-1022-110	1 PC
	ZEN Module Experiment Designer HW Lic.	
800	410136-1025-110	1 PC
	ZEN Module Tiles / Positions HW Lic. Key	
810	410136-1068-210	1 PC
	ZEN Module 3Dxl Hardware License Key	
	ZEN Module 3Dxl Hardware License Key (O)	
	Module for visualization and analysis of 3D or 4D image data. 3Dxl features the rendering of ray-tracing-based volume models (transparency), surface renderings and maximum intensity projection renderings. Time series (4D)/movies, the generation and export of movies as well as tools for interactive 3D measurements are included. 3Dxl is powered by technology from arivis AG (www.arivis.com) and is thus optimized to handle data sets that are larger than Graphics memory.	
990	410700-2015-876	1 PC
	LSM 800/880 Promotion	

AiryScan

Item	Product ID / Product Description	Quantity
860	000000-2058-580	1 PC
	Airyscan SR module GaAsP for LSM	
870	410136-1064-200	1 PC
	ZEN Module Airyscan Hardware License Key	
880	000000-2070-487	1 PC
	Emission filter BP 420-480 + BP 495-550	
	Emission filter BP 420-475 + BP 500-545 Airyscan	
890	000000-2070-488	1 PC
	Emission filter BP495-550+LP570 Airyscan	



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	Emission filter BP 500-545 + LP 575 Airyscan	
900	000000-2070-489	1 PC
	Emission filter BP570-620+LP645 Airyscan	
	Emission filter BP 575-615 + LP 655 Airyscan	
910	000000-2095-049	1 PC
	Double BP420-480+BP495-620 for Airyscan	
920	000000-2095-052	1 PC
	Double BP 420-480 + LP 605 for Airyscan	
930	000000-2095-051	1 PC
	Double BP 465-505 + LP 525 for Airyscan	
940	000000-2070-328	1 PC
	Support for LSM 880 Axio Observer + NLO	
950	000000-2155-398	1 PC
	Airyscan Fast Module Beam Shaper	
1020	410843-3954-814	1 PC
	Table for LSM 880 w/Airyscan 36x48, SP	

AxioObserver Microscope

Item	Product ID / Product Description	Quantity
11	409000-9671-000 Axio Observer 7 NLO RP Def Foc 2 LSM880 Axio Observer 7 RP stand LSM 880 NLO with DF2 objective turret Axio Observer 7 with motorized focus drive (min. step width 10 nm), motorized 3-position optovar turret, TFT touchscreen, Z-drive operation flat left, circular operation key unit right and left, additional keys for switching TL/RL illumination, light- and contrast manager, binocular tube 45°/23, 2x eyepiece PL 10x/23 Br. foc. with eyepiece eyecups, tiltable carrier for transmitted-light illumination, equipped with luminous-field diaphragm, 3-position filter changer and Interface for motorized condenser incl. Shutter, rear port for LSM, motorized 6x reflector module with ACR, ACR Beam combiner set for NDD detection , side port for NDD right, camera interface at sideport left, dust protection cover, interfaces 4x CAN, RS 232, USB and TCP/IP, trigger socket (In/Out) for shutter, connecting socket for external UNIBLITZ shutter and further components necessary for use with LSM.	1 PC
20	432907-9901-000 Docking-Station	1 PC
50	424242-0000-000 Condensor LD 0.55 H/Ph1/2/3/DIC	1 PC



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90	424533-9041-000	1 PC
	Compensation module Definite Focus	
	Compensation module Definite Focus for the optical adaptation in case no beam combiner of the Definite Focus module is present in the beam path.	
160	431018-0000-000	1 PC
	Z Drive Mot Extended Travel 13mm	
240	000000-1327-824	1 PC
	LSM fluorescence protection shield	
250	000000-1312-697	1 PC
	Safety kit for LSM 5 LIVE	
260	423000-9901-000	1 PC
	Lamphousing 12V/100W w/ Collector	
270	423013-9010-000	1 PC
	Illuminator HXP 120V	
280	380059-1660-000	2 PC
	Halogen lamp 12V 100W GY6.35	
290	457411-9051-000	1 PC
	Extension cable 2m for HAL 100/ LED	
300	000000-0482-760	1 PC
	Light Guide HXP120 (D), 2m	
310	000000-0482-730	2 PC
	Lamp HXP120 (D)	
320	000000-1031-346	1 PC
	FL Filter Set 38 Endow GFP, Shift Free	
330	000000-1114-101	1 PC
	FL Filter Set 43 CY 3 Shift Free	
340	488049-9901-000	1 PC
	FL Filter Set 49 DAPI,EX G365 S free	
350	488050-9901-000	1 PC
	FL Filter Set 50 Cy5, EX BP640/30 S free	
360	424933-0000-000	4 PC
	Reflector Module FL EC ACR P&C	
520	426559-0000-000	1 PC
	Camera Axiocam 503 mono	
530	426114-0000-000	1 PC
	C-Mount Adapter 60N C 1" 1.0x	



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Optics

Item	Product ID / Product Description	Quantity
361	420340-9901-000 EC Plan-Neofluar 10x/0.30 WD=5.2 M27	1 PC
370	420650-9902-000 Objective PApo 20x/0.8 Objective Plan-Apochromat 20x/0.8 M27 (FWD=0.55mm), incl. Cover glasses, high performance, CG=0.17mm, box with 100 pc	1 PC
380	420762-9800-799 Objective PApo 40x/1.3 Oil DIC WD=0.20 Objective Plan-Apochromat 40x/1.3 Oil DIC M27 (WD=0.20mm), UV-IR incl. Immersol 518 F for 30°, oiler 20ml and Cover glasses, high performance, D=0.17mm, box with 100 pc.	1 PC
390	420782-9900-799 Plan-Apochromat 63x/1.40 Oil DIC f/ELYRA	1 PC
410	424508-0000-000 Objective Ring ACR f/ obj. casing, cyl.	2 PC
420	424509-0000-000 Objective Ring ACR f/ obj. casing, short	2 PC
430	426940-0000-000 DIC Slider EC PN 10x 20x/PA 20x	1 PC
440	426965-0000-000 DIC Slider PA 40x/1.3 III	1 PC
450	426957-0000-000 DIC Slider PA 63x/1.4 III HR	1 PC
460	000000-1005-867 DIC Prism II/0.55	1 PC
470	000000-1005-868 DIC Prism III/0.55	1 PC
480	000000-1121-813 Polarizer D Rotatable	1 PC
490	424921-9901-000 Analyzer Module P&C D DIC ACR	1 PC



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Motorized Stage & Piezo

Item	Product ID / Product Description	Quantity
60	451353-0000-000 Universal Mounting Frame KX	1 PC
70	000000-1082-283 Universal Mounting Frame KN	1 PC
80	409000-9420-000 Scanning Stage 130x100 STEP Set LSM Scanning Stage 130x100 STEP Set for LSM consists of: - Scanning Stage 130x100 STEP with stepper motor (2 mm spindle pitch) incl. Stepper controller SMC 2009, Joystick XY, fixed motor cable with exit on stage left back side and universal mounting frame K (160 mm x 110 mm), also suitable for Z-Piezo - travel range: 130 mm x 100 mm (adjustable) - max. speed: 25 mm/s - resolution: 0.1 µm - reproducibility: +/- 1 µm - absolute accuracy: +/- 5 µm - stage surface: 325 mm x 144 mm - compatible with objectives autocorr	1 PC
180	432339-9000-000 Stage attachment Z PIEZO WSB 500 Stage attachment Z PIEZO WSB 500 (D) for mechanical and scanning stages Axio Imager and Axio Observer - for mounting on top stage plate - travel range in Z: 500 µm - max speed: 5 mm/sec - resolution: 1 nm - reproducibility: +/- 5 nm - max. load: 2 kg	1 PC
190	432339-9010-000 Controller Z PIEZO WSB 500 Controller Z PIEZO WSB 500 Control unit for Stage attachment Z PIEZO WSB 500 - CAN interface - alternative connection through USB or RS232 - Trigger IN - Trigger OUT - power supply 100 ... 240V AC/50 ... 60Hz - incl. USB-cable, CAN-cable and plug-in power unit with country specific power cord	1 PC
200	432339-9020-000 Control wheel Z PIEZO WSB 500 Control wheel Z PIEZO WSB 500 (D)	1 PC



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	with position indicator	
210	000000-1356-074 Cable for stage top frame Z PIEZO	1 PC
220	432339-9030-000 Stage insert Z-PIEZO WSB Universal	1 PC
230	432339-9050-000 Stage insert Z PIEZO WSB Heating inserts Stage insert Z PIEZO WSB 500 for Heating Inserts P S1 / Mxx S1 (D) to insert into Stage attachment Z PIEZO WSB 500 on inverted microscope stands. Applicable for all heating inserts P S1 / M06 S1 ... M96 S1	1 PC

Incubator

Item	Product ID / Product Description	Quantity
10	411860-9020-000 Heating Insert P S1	1 PC
30	411857-9511-000 Slide-in module "standard" XLmulti S1	1 PC
40	411857-9400-000 Incubator XL multi S1	1 PC
110	411860-9010-000 Temp Module S1	1 PC
120	411857-9031-000 Heating Unit XL S2	1 PC
130	411857-9050-000 Heating Device Humidity S1 (D)	1 PC
140	411857-9010-000 CO2 Module S1	1 PC
150	411857-9110-000 CO2 Cover PM S1	1 PC
170	000000-2180-519 Air Duct Tube, Extension, 1m, XL multi S1 Air duct tube, extension, 1m (D) for all XL S1 and XLmulti S1 incubators	1 PC



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Offline Analysis

Item	Product ID / Product Description	Quantity
820	410135-1004-230 ZEN 2.3 desk Hardware License Key ZEN 2.3 desk Hardware License Key ZEN image processing under Win 7 / 10 x64. Offline processing and analysis without microscope control, deliverable with an existing license of ZEN system. Includes the basic ZEN functionality, and the modules of the respective ZEN system license without image acquisition. The following modules are basically included: - ZEN Module Measurement - ZEN Module Image Analysis - ZEN Module Extended Focus	1 PC
830	000000-2205-975 User-PC advanced Z55A Highend Microscopy Workst. Premium, User PC for LSM, ELYRA and CD7, Win 10 (O) HP Z840 Workstation for LSM, ELYRA and CD7 systems - CPU: 2 x Intel® Xeon® E5-2623v3 4-Core 3.0 GHz - Memory 64 GB (4x16) DDR4-2133 MHz ECC registered RAM (12 slots free) - Hard Drives: 4 x 2 TB as 4 TB RAID 10 drive - Nvidia Quadro K2200 4 GB graphics - Dual integrated 10/100/1000 LAN interface - Slim DVD +/- RW recorder for rewriteable media - Rescue kit: (USB stick 16 GB recovery image) - Language Package Windows 10 LTSB Embedded x64 English US - HP KEYBOARD USB US - HP USB Laser Scroll Mouse	1 PC
840	410303-3203-000 Memory 32 GB (2x16) DDR4-2133 (Z840) Memory 32 GB (2x16) DDR4-2133 MHz ECC registered RAM (O) consisting of 2 x 16 GB modules	4 PC
850	410350-2700-000 Monitor TFT 27"HP Z27n Monitor TFT 27" HP Z27n (68 cm)	1 PC
1000	410358-0502-000 Network Adapter 10 Gigabit PCIe x4 Network Adapter 10 Gigabit PCIe x4 (O)	2 PC
1010	000000-2147-606 30m Patch Cable CAT7	1 PC



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NLO

Item	Product ID / Product Description	Quantity
540	000000-2219-301 NDD.2 module type C, 2 channels NDD.2 module type C, 2 channels for inverted stands extendable by a maximum of 2 modules with one detector each. Alternatively 1 x BiG.2 can be attached. Positioning of the detectors at the right side away from the stand.	1 PC
550	000000-2010-753 NDD module 1 channel, extendable	1 PC
560	000000-1785-479 LBF 355/690 for all NDD Modules	1 PC
570	000000-1935-165 NDD Filter set 3i	1 PC
700	000000-2171-107 Equipment NLO+405/445 Observer/Imager Equipment NLO and 405 or 445 laser for Observer/Imager includes beam path NLO+405/445, basic electronics for external laser, AOM control electronics 1080 nm	1 PC
710	000000-1756-068 Beamrouting kit for NLO laser LSM 710	1 PC
970	410862-7002-000 Mai Tai HP DeepSee Tunable Laser	1 PC
980	410843-1514-082 NLO System table for LSM 710	1 PC

Subtotal	1,069,252.00 USD
No Demo Discount	-15,000.00 USD
Subtotal 4	1,054,252.00 USD
PromotionalDiscount% -32.00% of 891,252.00 USD	-285,200.64 USD
Subtotal	769,051.36 USD
Freight	2,252.00 USD
Total excluding Taxes	771,303.36 USD



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