To: WenZhou University

Attn: Jialong Zhao Cell: 13756022708 From: ETSC Technologies Co.

Contact: Tom Wu Tel: 027-87807177 Fax: 027-87807133

## **QUOTATION**

No.: Q1301395 Date: 2014-04-11

## Regarding to your request, we are pleasure inform you as follows:

Item	Model	Description	Qty	Unit Price	Sub Total
1	972001	FluoTime 300 Fluorescence steady state and lifetime spectrometer	1	EUR169355.00	EUR169355.00
1-1	03210	Excitation system consisting of:	1		
1-1-1	910007	PDL 820 Computer controlled diode laser driver for picosecond pulses - internal repetition rates between 196 kHz and 80 MHz - external trigger input - cw operation of suited laser heads (LDH-D Series) - controlled from EasyTau software	1		
1-1-2	LDH-P-C-405	LDH-P-C-405 Laser head for picosecond pulses - 405 ± 10 nm - incl. collimator and temperature stabilisation	1		
1-1-3	72019	Adapter for laser heads of the LDH-P-C / LDH-D-C type - for coupling to the FluoTime 300	1		
1-1-4	PLS 320	PLS 320 LED-head for sub-nanosecond pulses - 320 ± 5 nm - incl. a simple collimator and colored glass filter - max. repetition rate 10 MHz	1		
1-1-5	PLS 370	PLS 370 LED-head for sub-nanosecond pulses - 380 ± 10 nm - incl. a simple collimator and bandpass filter	1		
1-1-6	PLS 450	PLS 450 LED-head for sub-nanosecond pulses - 460 ± 10 nm - incl. a simple collimator	1		
1-1-7	BPF 450	BPF 450 Bandpass filter for PLS 450	1		
1-1-8	72020	Automated polariser in laser / LED excitation arm - 15 mm Glan Thompson prism, "UV Grade" - wavelength range 220 nm to 1500 nm	1		
1-1-9	72022	Adjustable lens assembly in laser / LED excitation arm - High NA quartz focusing optics	1		
1-1- 10	72023	Laser / LED coupling port - for lasers of the LDH Series and LEDs of the PLS Series from PicoQuant - also suited for coupling of a free space beam from an external excitation source	1		
1-2	03211	Excitation system (cw and/or sub-µs) consisting of:	1		

Item	Model	Description	Qty	Unit Price	Sub Total
1-2-1	72099	Coaxial UV-Xenon arc lamp - ozone free 300 W steady state excitation lamp - emission spectral range 250 nm to 2600 nm - incl. power supply, housing and excitation optics	1		
1-2-2	72106	Pulsed Xenon flashlamp - pulse width 400 ns - repetition rate 0.1 to 300 Hz - emission spectral range 185 nm to 2000 nm - incl. power supply, housing and excitation optics	1		
1-2-3	72101	Adjustable lens assembly in cw/sub-µs flashlamp excitation arm - High NA quartz focusing optics	1		
1-2-4	72102	Automated polariser in cw/sub-µs flashlamp excitation arm - 15 mm Glan Thompson prism, "UV Grade" - wavelength range 220 nm to 1500 nm	1		
1-2-5	72104	Automated shutter for cw/sub-µs flashlamp excitation arm	1		
1-2-6	72107	Reference detector for cw excitation - calibrated photodiode to measure excitation intensities	1		
1-2-7	72108	High resolution excitation monochromator - 300 mm focal length - incl. one grating with 1200 lines / mm, blazed at 300 nm - 2.7 nm / mm dispersion - motorized input and exit slit	1		
1-2-8	72100	Base plate extension - for cw and/or sub-µs pulsed Xenon flashlamp excitation	1		
1-3	03212	Sample chamber and detection optics consisting of:	1		
1-3-1	72200	Sample chamber - large sample compartment with all basic support mechanics for optics and optomechanics	1		
1-3-2	72213	Front face sample holder for FluoTime 300 - for small solid samples	1		
1-3-3	72202	Automated collection optics - High NA quartz optics for maximum sensitivity	1		
1-3-4	72203	Automated attenuation unit in emission arm - to regulate signal intensity	1		
1-3-5	72204	Manual filter slider - suited for 50 mm optics in emission path - accessible from outside of the sample compartment	1		
1-3-6	72206	Automated polariser in emission arm - 15 mm Glan Thompson prism, "UV Grade" - wavelength range 220 nm to 1500 nm	1		
1-3-7	72228	High resolution emission monochromator - 300 mm focal length - incl. one grating with 1200 lines / mm, blazed at 450 nm - 2.7 nm / mm dispersion - one exit port, all slits motorized	1		
1-3-8	72220	Assembly for MCP-PMT detector of FluoTime 300 - high voltage power supply, housing including shutter interlocked with sample chamber lid - build in pre-amplifier - CAN interface - MCP-PMT quoted seperately	1		
1-3-9	03154	MCP-PMT Photomultiplier - Type R3809U-50 - Spectral sensitivity range 160 - 850 nm	1		

Item	Model	Description	Qty	Unit Price	Sub Total
1-4	03213	Electronics and system software consisting of:	1		
1-4-1	72300	Solid system mainframe incl base plate with integrated power-supplies - all signal cabling and control electronics - CAN / USB interface	1		
1-4-2	PicoHarp 300E	PicoHarp 300E TCSPC module with USB 2.0 connection - two independent input channels with min. 4 ps time resolution (time bin width) - 65535 time bins with 16 bit count depth - incl. data acquisition software for Windows - imaging and routing not supported	1		
1-4-3	930032	TimeHarp 260 NANO Single MCS PC plugin board for the PCIe bus - independent channels with 1 ns temporal resolution suited for 1 sync & 1 detector or for 2 detectors - histogramming with 32768 time bins and 32 bits depth - incl. data acquisition software for Windows, time tagging of all events and 2 SMA signal cables (1.8m length)	1		
1-4-4	72301	Dual signal switch - allows automated signal switching between two detectors or two detection electronics	1		
1-4-5	72303	Signal cabling for detectors and synchronisation signal	1		
1-4-6	971060	Host PC system: - incl. network adapter, DVD-RW drive - graphic card - installed and tested software - optimized for high data throughput - monitor quoted separately	1		
1-4-7	72304	"EasyTau" system software: - full control of automated FluoTime 300 hardware - application wizards for easy data acquisition - expert mode incl. data acquisition macros - easy data exchange with FluoFit software package	1		
1-4-8	931060	FluoFit Pro Software for multi-exponential decay analysis for FluoTime 300 with "EasyTau" - incl. tail fitting and numerical reconvolution - incl. also lifetime distribution models, anisotropy, global analysis and error analysis - 1 single user license (incl. hardlock)	1		
1-4-9	973180	PC Monitor - TFT Display	1		
2	72211	Optional system components  Temperature controlled cuvette holder for 1x1cm cuvettes - inbuilt magnetic stirrer, beam height: 8.5 mm above base - temperature range - 40°C to 105°C (Operation below ambient dew point temperature requires dry gas purge.  Operation below -10 °C requires pre-cooled circulating fluid within 25 °C of the desired temperature. The necessary additional equipment is not part of the sample holder)	1	EUR5525.00	EUR5525.00

Item	Model	Description	Qty	Unit Price	Sub Total
3	72209	Optional system components	1	EUR8290.00	EUR8290.00
		Automated four-position sample changer for 1x1cm cuvettes			
		- inbuilt magnetic stirrer, beam height: 8.5 mm above base			
		- temperature range - 25°C to 105°C (Operation below			
		ambient dew point temperature requires dry gas purge.			
		Operation below -10 °C requires pre-cooled circulating fluid			
		within 25°C of the desired temperature. The necessary			
		additional equipment is not part of the sample holder)			
4 7	70491	Optional system components	1	EUR10940.00	EUR10940.00
		Integrating Sphere Accessory for FluoTime300 - Spectralon™ reflective surface with flat spectral			
		distribution over most of the UV-VIS-NIR from 250 to 2000 nm			
		- Sphere-diameter 78 mm - suitable for laser and lamp illumination			
		- includes sample holder for standard fluorescence cuvettes			
		with direct and indirect sample position			
5 F	PMA-C 182-M	Optional system components	1	EUR6385.00	EUR6385.00
		PMA-C 182-M Peltier cooled Photomultiplier (PMT)			
		- incl. Peltier cooling, preamplifier, shutter and power supply			
		- 185 - 820 nm, typ. <180 ps TTS - negative voltage output			
1 6	MCP-PMT-	Optional system components	1	EUR11370.00	EUR11370.00
	FluoTime200 [971053]	MCP-PMT Peltier cooler for FluoTime 200/300			
	-	- water-cooled thermoelectic cooler for MCP-PMT detector			
		<ul> <li>incl. cooler power supply, housing and socket</li> <li>MCP quoted separately</li> </ul>			
		- requires local supply of cooling water (not part of this			
		quotation)			
Total: Freight & Insurance Cost:					EUR211865.00
Freight & insurance Cost.  Final Price:					EUR2000.00 EUR213865.00

## NOTES:

- 1. Terms of Price: CIF Hangzhou.
- 2. Terms of Payment: 100% T/T in advance within 15 days after signing the contract.
- 3. Delivery if Schedule: 4~5 month(s) after receipt of the payment.
- 4. Warranty: 12 months after shipping out the goods.
- 5. This quotation's validity expands until 2014-04-25.