



## PURCHASE CONTRACT No. 144/OVZ/PJ/2021

#### **CONTRACTING PARTIES:**

BUYER: PALACKÝ UNIVERSITY IN OLOMOUC

Public university established by Act. No. 111/1998 Coll., on Higher Education Institutions and on Amendments to Certain Acts (Act on Higher Education Institutions), as amended

Office: Křížkovského 511/8, 771 47 Olomouc, Czech Republic

Rector: prof. MUDr. Martin Procházka, Ph.D.

Person authorized to act in technical matters:

 Ident. no.:
 61989592

 Tax Ident. no.:
 CZ61989592

Bank contact:

(hereinafter referred to as "Buyer")

and

SELLER: Fujifilm Wako Chemicals USA Corp.

Office: 1600 Bellwood Road, Richmond, Virginia, 23237, USA

Registration in Companies Register: 0751752-1, State of Virginia, USA

Statutory body: Mr. Toshihiro Hiramatsu, President

Person authorized to act in contractual matters: Person authorized to act in technical matters:

Ident. no.: 45-5385265 Tax Ident. no.: 45-5385265

Bank contact/Account No.:

45-5385265

(hereinafter referred to as "Seller")





are closing on the bellow stated day, month and year according to provision of Section 2079 et seq. of the Act no. 89/2012 Coll., Civil Code, as amended, this purchase contract (hereinafter referred to as "Contract"), in the framework of the project: Modernization of the National Infrastructure for Chemical Biology", reg. nr. CZ.02.1.01/0.0/0.0/18\_046/0016118, within Operational Programme Research, Development and Education.

The Buyer and the Seller enter into this contract due to the fact, that the Seller's offer was selected by the Buyer in the tender procedure entitled "LF/UMTM - Restoration of a confocal microscopy device integrated into a robotic platform " as the most suitable offer.

#### I. Subject of the fulfillment

- 1. The Seller undertakes, under this contract, to deliver to the Buyer YOKOGAWA CV8000, (hereinafter referred to as the "Goods") in type, quantity, quality and design according to specification, that is an integral part of this Contract as its Annex No. 1. The Seller is not entitled to deliver goods in larger quantity as stated in Section 2093 of the Civil Code. Both parties to this contract agreed that Section 2099 subsection (2) of the Civil Code will not be applied.
- 2. The Seller hereby undertakes to surrender the Goods specified in Annex no. 1 to this Contract to the Buyer and allow him to acquire property rights to it, carry out the installation of the goods, provide the training to the Buyer's staff by qualified worker, provide the warranty service under the conditions stipulated by this contract.
- 3. The Buyer agrees to take over the Goods and pay the seller the purchase price in the way and in time agreed to in this Contract.
- 4. Part of the delivery of the subject of the Contract is transport and delivery of legal documents.
- 5. The Seller declares pursuant to Section 2103 Civil Code, that the Goods is without any faults or defects.
- 6. The Goods shall be fully functional, new, not refurbished, without any additional costs or expenditures necessary to be paid by the Buyer.

## II. Term and place of delivery

1. The Seller undertakes to deliver and install the goods at the place of delivery, including the delivery of all legal documents to the goods, the execution of all tests verifying compliance with technical parameters given in this contract, the training of the Buyer's staff by a qualified





employee within the scope of Article V paragraph 2 of this Contract, no later than 100 days after the effective date of this Contract.

- 2. Place of delivery: Room 2.30, Institute of Molecuar and Translation Medicine, Faculty of Medicine and Dentistry, Palacký Univerzity Olomouc, Hněvotínská 1333/5, 779 00 Olomouc, Czech Republic. Person authorised to take over the delivery on the basis of a handover protocol: or a person authorised by him to take over the goods.
- 3. Both parties agreed, that Section 2126 and Section 2127 Civil Code on self-help sale will be excluded and thus shall not be applicable in the case of delay in take-over of the Goods by the Buyer.

## III. Purchase price

- 1. The purchase price is set by an agreement of the contracting parties in the amount of 22 573 805,00 CZK without VAT, VAT in the amount of 4 740 499,00 CZK, total price in the amount of 27 314 304,00 CZK incl. VAT.
- 2. The purchase price covers all the costs related to the supply of the goods (in particular the transport to the place of delivery, insurance, customs duties, fees, licence fees and copyrights, installation and arranging for training, delivery of all legal documents to the goods, the warranty service).
- 3. The purchase price is set as a fixed price, the highest acceptable and maximal, covering all the costs related to the supply of the goods. The purchase price may be modified only on the condition that the VAT rate changes after the conclusion of the present contract.
- 4. The Seller takes the responsibility for the fact, that the VAT rate at the time of invoicing is stipulated in compliance with the legislation.

## IV. Payment terms

1. Payment for the delivery of the Goods shall be made on the basis of a duly issued tax document (invoice), including all the requisites, within the due date of 30 calendar days from the date of the provable delivery to the Buyer. The invoice will be issued by the Seller at the earliest after delivery of the Goods, its proper and complete installation, delivery of legal





documents, performance of all tests verifying compliance with technical parameters given by this Agreement, initial basic operator training within the scope of Article V. paragraph 2 of this Agreement, which will be confirmed by a written protocol on the delivery and installation of the Goods. Proof of the proper fulfillment of the obligations stated in the previous sentence by the Seller is a written dated handover protocol provided with the signatures of the authorized persons of both contracting parties to act in technical matters.

- 2. Each invoice issued by the Seller must include all tax document prerequisites in accordance with Act No. 235/2004 Coll. on value added tax as amended and the prerequisites of a commercial deed pursuant to Section 435 of the Civil Code as well as identification of the contract, on the basis of which the fulfilment has been provided. The Seller shall affix the invoice with the stamp and signature of the person authorised to issue the invoice. Each invoice issued will bear the number of this contract, and name and number of the project.
- 3. If any invoice issued by the Seller does not contain any of the obligatory particulars or if the Seller incorrectly invoices the price or the VAT, the Buyer is entitled to return such invoice to the Seller before the expiration of its maturity date for the correction, stating the reason of its returning. The Seller shall correct it by issuing a new invoice. The initial maturity date stops running on the day of sending the incorrect invoice to the Seller and a new maturity day starts running on the day of the delivery of a new invoice to the Buyer.
- 4. The contracting parties agree that the obligation to pay the purchase price is fulfilled on the day when the given sum is sent from the Buyer's account to the Seller's account given above in this contract.

## V. Installation and training of the staff

- 1. As part of the installation of the goods at the place of delivery, the Seller is obliged to prove, but not exclusively, the full functionality and fulfillment of all the parameters of the goods in accordance with the offer of the Seller, which will form an integral part of the contract (Annex No. 1 of the contract).
- 2. The Seller undertakes to provide basic operator training, which is a condition for the due handover and reception of the device within the following scope:
  - The basic training of the Buyer's staff one how to operate the delivered goods, for at least 3 Buyer's employees, in scope of at least one day, 8 hours. The training must be led by qualified service technician or application specialist.





3. All trainings shall take place at the place, where delivered goods have been installed, unless agreed otherwise in writing by the persons authorised by the contracting parties to act in technical matters. Precise dates of the respective trainings shall be agreed in a sufficient advance by the person authorised by the buyer to act in technical matters. All the costs related with the above-mentioned trainings (including the stay of service technicians, application specialists or specialists of the Economic Operators of the accessories) are paid for by the Seller.

## VI. The Seller's responsibility for defects

- 1. The seller provides a quality guarantee for the goods according to § 2113 et seq. Act No. 89/2012 Coll., Civil Code, as amended, for a period of 24 months from the date of signing the handover protocol pursuant to Article IV. paragraph 1 of this Contract.
- 2. Seller guarantees promptness of service in the warranty period, ie. travel to the place of installation, conducting detection of defects and discussing the necessary service operations with person authorized by the Buyer to act in technical matters, during warranty period no later than within 10 workdays from the day of report of the defect, by visit from service technician. During the warranty period, the respective defects shall be removed within 15 work at the latest after the day of the start of the defect removal, unless otherwise agreed in writing by persons authorized by contracting parties to act in technical matters. The seller is obliged to provide repairs in the place of delivery, shall that be technically impossible, seller shall take over the "faulty part" of the goods in order to repair it after signing a written protocol, stating suggested procedure agreed by the person authorised to act in technical matters for the contracting person. The contracting parties have agreed that § 2110 Civil Code shall not apply; the buyer is therefore entitled to withdraw from the contract for defects or demand the delivery of new goods, regardless of whether he can return the goods, or return them in the condition in which they were received.
- 3. Seller also undertakes to perform free full service of the delivered equipment and of control and evaluation software, including updates and staff training and regular service inspections prescribed by the manufacturer of the delivered equipment for the entire guarantee period, including all necessary spare parts (free warranty service of delivered goods). Seller further undertakes to provide unlimited and free remote diagnostics and service of the device through remote access and connection to the device. The costs of performing a full guaranty service







of the delivered goods form part of the Seller 's offer price. During the warranty period, the seller is obliged to ensure at his own expense all legal inspections of goods.

#### VII. Affirmation of commitment

- 1. The Contracting Parties shall, in the event of a breach of the contractual obligation, agree on contractual penalties in the form provided for in the following paragraphs of the Contract. Neither contractual Contracting Party considers that the contractual penalties are disproportionate in relation to the value of the individual contractual obligations.
- 2. The Seller undertakes to pay the Buyer a contractual penalty in the amount of CZK 40,000 for each commenced day of delay with the contractually set delivery date as per Article II. paragraph 1 of this Agreement.
- 3. The seller undertakes to pay the buyer a contractual penalty of CZK 5,000 for each, even commenced day after the expiration of the period for embarkation on repair or repair during the warranty period in accordance with Article VI. of this Agreement, for each individual case.
- 4. The contracting parties have agreed that § 2050 of the Civil Code shall not apply, ie that contractual penalties are not included in the compensation for any damage incurred, which can be enforced separately in full in addition to the contractual penalty.
- 5. The maturity date of the charged contractual penalties is 30 days from the day of delivery of their written statement to the given contracting party and the day of payment means the day of debiting the contractual penalty amount from the account of the given contracting party to the account mentioned in the statement of the contractual penalty.
- 6. The parties have expressly agreed that the buyer is entitled to offset against any buyer's claim both for the buyer and for the buyer, any claim against the seller, even overdue. Receivables from the buyer and the seller are canceled with the offsetting of the amount in which they overlap, and these effects occur as soon as the buyer delivers the statement of offsetting to the seller.

## VIII. Final provisions

1. With respect to the provision of section 2, letter e) of Act no. 320/2001 Coll. on the Financial Inspection in Public Administration, as amended, the Seller is a person obliged to cooperate





during the performance of the financial inspection. These Seller's obligations also apply to his contractual partners involved in the fulfillment of this contract.

- 2. The Buyer reserves the right to publish the contents of the concluded Purchase Contract.
- 3. This Agreement is governed by the Civil Code and the legal order of the Czech Republic in matters not expressly regulated in it.
- 4. The provisions of this contract are separable. If any part of an obligation under this contract is or becomes invalid or non-enforceable, this shall not affect the validity and the enforcement of other obligations under this contract and the contracting parties undertake to replace such invalid or non-enforceable part of obligation with a new, valid and enforceable part of the obligation, the subject of which will correspond at the best to the subject of the original obligation. If the contract does not contain a provision which would be justifiable for the determination of the rights and obligations, the contracting parties will make all the efforts to implement such provision in the contract.
- 5. The contracting parties may modify or amend this contract only in the form of written amendments numbered in the increasing order, expressly declared as amendments to this contract and signed by the authorized representatives of the contracting parties.
- 6. The Buyer is entitled in accordance with § Section 2001 of Act No. 89/2012 Coll., the Civil Code, as amended, to withdraw from this contract in following cases:
  - delay of the seller with the delivery of goods longer than 10 days,
  - non-compliance with the technical specifications of the goods stated in the seller's offer,
  - the seller's delay in starting to eliminate defects by more than ten days,
  - in the event that the provision of subsidy funds drawn for the implementation of the subject of the contract from the relevant project will be suspended or terminated,
  - in the event that the expenses that should be incurred on the basis of this contract will be marked by the provider of subsidy funds or another authorized administrative body as ineligible to be reimbursed from the project subsidy funds

The withdrawal from the contract shall be made in a written form and becomes effective on the day of the delivery of the written notice to the other contracting party.





- 7. The Seller is not entitled to cede his rights and obligations under this contract to a third person without the Buyer's approval.
- 8. With regard to the delivery of items relating to the performance of this Agreement sent by the Seller using the postal service provider, § 573 of the Civil Code shall not apply
- 9. The Seller acknowledges that this Contract, including all its Annexes, is subject to mandatory disclosure under Act No. 340/2015 Coll., on special conditions of effectiveness of certain contracts, publication of these contracts and on the register of contracts, as amended.
- 10. This Contract shall enter into force on the date of its signature by the last Participant of this Contract and effective as of the date of publication of this Contract in the register of contracts pursuant to Act No. 340/2015 Coll., on special conditions of effectiveness of certain contracts, publication of these contracts and on the register of contracts, as amended.
- 11. This Purchase Contract is signed electronically.
- 12. Seller acknowledges, that Buyer is obliged to abide to publicity requirements within structural funds programs, set by European Parliament regulation No. 1303/2013 and publicity rules within OP VVV, on all relevant documents related to the subject of this Contract, in all amendments to this Contract and other documents related to the public tender, from this Contract came up and in this context Seller commits to provide necessary cooperation to the Buyer, that can be fairly demanded.
- 13. Seller hereby obliges, that all subjects authorized to conduct control of the project, by means of which the subject of this Contract is paid, will be allowed to carry out control of documents related to this subject, during period set by legislation of Czech republic for their archivation (Act No. 563/1991 Coll., on accountancy, in its effective form and Act No. 235/2004 Coll., on value added tax, in its effective form). All outcomes of the contractual relations, where Buyer specifies it, must contain publicity features, in scope of headers of this Contract, unless specified otherwise by Buyer. EU logo, logo of Operational Programme Research, Development and Education (hereinafter reffered to as "OP RDE"), as requested by Buyer. Buyer is obliged to provide documents containing correct form of every logo.





14. Seller is obliged to keep all documentation related to subject of this Contract in accordance with the OP RDE rules for at least 2 years from the date of presenting financial statements of OP RDE according to Sect. 140 of European Parliament and Council regulation No. 1303/2013, ie at least until 31. 12. 2033, unless czech legal system specifies longer period. Managing authority of OP RDE, or by it authorized subjects (or other control subjects according to actual legislation) shall have access to these documents upon request.

15. The following Annexes form an integral part of this Purchase Contract:

Annex 1 – Seller's offer dated on December 15,2020

In Olomouc 08.07.2021 In Richmond 06.07.2021

nrof MUDr Martin Procházka Ph D Mr Toshihiro Hiramatsu

prof. MUDr. Martin Procházka, Ph.D.. rector of Palacký University in Olomouc

Mr Toshihiro Hiramatsu President of Fujifilm Wako Chemicals USA Corp.



Quotation Date: 7 January 2021 Valid Date: 6 April 2021 Quotation: WA070121-1

Tender Response:

LF/UMTM - Restoration of a confocal microscopy device integrated into a robotic platform

Institute of Molecular and Translational Medicine (IMTM)
Palacky University
Olomouc
Czech Republic

Wako Automation Division Fujifilm Wako Chemicals USA Corp. 5405 Morehouse Dr., Ste 110 San Diego, CA 92121 USA



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Wako	Automation Div.
Fujifil	m Wako Chemicals USA Corp.
P:	
E:	



## 1 WAKO AUTOMATION

- We are a subsidiary of Fujifilm, a global group of companies in the photo imaging, medical systems, graphics systems and healthcare industries.
- Wako Automation has more than 10 years of automation experience and we know our customers are the experts when it comes to their specific assay design. Our philosophy is to present choices that enable the ideal system for our customers specific assay design.
- Our goal is to insure a maximum of uptime for your equipment. While we
  provide prompt and professional service to repair your equipment, we believe that
  uptime is most likely to be achieved through preventative maintenance and proper
  operating procedures. This is why we include preventative maintenance as part of
  our program.



## 2 YOKOGAWA CV8000 PLATFORM

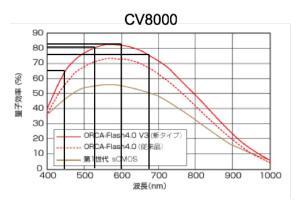
The CV8000 is the third (3<sup>rd</sup>) generation Cell Voyager platform using the micro-lens enhanced dual spinning disk confocal imaging system. Designed by Yokogawa to

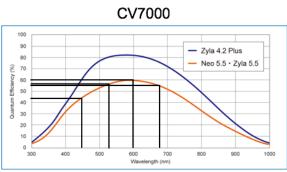
provide the highest quality images, fastest acquisition speeds, and long term live cell imaging.

#### **Cameras**

The CV8000 can use a maximum of four (4) Hamamatsu Orca Flash 4.0 sCMOS cameras. These are second generation sCMOS cameras with a maximum quantum efficiency (QE) of 82%. This improved QE gives the cameras a higher signal-to-noise ratio, providing more sensitivity for weak emissions.

The graph below shows the signal of the CV8000 cameras compared to the signal of the CV7000 cameras.





## 2.1 Light Sources

The CV8000 is a fully automated imaging platform for confocal, bright field, epifluorescent and phase contract imaging.

#### **Confocal Laser Light Sources**

Standard excitation lasers are 405, 488, 561 and 640 nm. A laser for FRET (445nm) excitation is also included.

#### **Additional Light Sources**

Bright field and phase contrast imaging use the LED white light source. There is also a **UV-LED** (365nm) for epifluorescence (fluorescence) imaging.

## **Fully Incubated stage**

Fully incubated stage with humidity control (maximum 85% rH), temperature control (from ambient +5°C - 40°C) and CO<sub>2</sub> control. Enables live cell imaging for up to 72 hours (3 days).

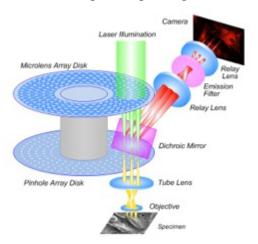
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## Autofocus

The CV8000 provides both laser-based autofocus and image-based autofocus. Capable of

**CSU-W1**Dual Nipkow Spinning Disk



imaging 6, 12, 24, 48, 96, 384 and 1536-well microplates, as well as microscope slides with a slide holder (included).

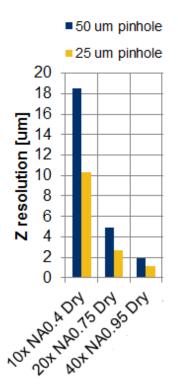
# 2.2 Confocal Scanning Unit – CSU-W1

The CSU-W1 is the core of the Yokogawa CV8000 confocal technology. Microlens enhanced confocal spinning disk technology works similarly to conventional spinning disks with one important distinction; these systems have two spinning disks. One spinning disk is composed of approximately 20,000 microlenses and the other is composed of an equal number of pinholes.

Each microlens is aligned with a pinhole and the two disks spin in unison. Each of the microlenses focuses a wide area of excitation energy into its matching pinhole, increasing the amount of excitation energy that reaches the sample and reducing the amount of excitation energy reflected back to the camera. Microlens—enhanced, dual spinning disk technology significantly increases the sensitivity compared to systems that use a single spinning disk.

## 2.3 Dual-Pinhole Dual Spinning Disk

The CV8000 has the option of a **dual-pinhole**, **dual spinning disk** configuration providing both 50 micron and 25 micron pinholes. The 25 micron pinhole provides significantly improved axial and lateral resolution at low magnification (4X, 10X, 20X).





## 2.4 Digital Phase Contrast

Using a set of brightfield images taken at differing Z-axis settings Yokogawa makes it possible to create a digital phase contrast (DPC) image without use of a phase contrast objective. Shown at the right is a DPC images with the standard 20X objective.

Use of DPC enables any objective to provide phase contrast imaging, no longer requiring a dedicated phase contrast objective.

# 2.5 High Speed Confocal Imaging

Here is the time required to image 384-well and 96-well plates with a single field of view (FOV) with four (4) cameras (without binning).

#### **Four Cameras:**

2 min / 96-well plate (1 field with 4 colors) 5 min / 384-well plate (1 field with 4 colors)

## 2.6 Wako Software Suite for the CV8000 Platform

The Wako Software Suite includes a set of programs that run on the CV8000S workstation to provide enhanced imaging and screening results. The SearchFirst hit-finding software works with:

- 1. CV8000 analysis software (Cell Pathfinder)
- 2. Cell Profiler
- 3. Fiji
- 4. Matlab
- 5. KNIME
- 6. Python scripts

The Wako Software Suite includes:

- 1. SearchFirst<sup>™</sup> Provides automated hit-finding. This software enables the CV8000 to quickly search for objects of interest and then automatically go back and re-image those objects in more detail.
- 2. Tile Image Creator This software enables the CV8000S to produced one set of tiled images per well based on a users specifications.
- 3. Auto-launch Analysis Script This software enables the CV8000S to auto-launch ImageJ scripts after a plate is read.
- 4. Screen Sentry<sup>™</sup> This software may be useful for labs using the CV8000S with an automated system. Particular wells of a plate can be quickly scanned and tested to ensure it is worth imaging the entire plate. If a bad plate is detected it can be ejected without being fully imaged, saving valuable time.



These programs can be used independently or in conjunction with each other. The software can be used with a standalone CV8000 or it can be used with a CV8000 in a fully integrated system.



# **3 YOKOGAWA CV8000 SPECIFICATIONS**

# 3.1 Required Specifications

The requirements from the tender document, and the offered specifications.

Technical Specification	Offered Specification
Confocal imaging mode with a minimum of three simultaneous color recording (evaluation parameter)	4 cameras
Minimum 3 Wide view sCMOS cameras (evaluation parameter)	4 cameras
Confocal unit based on microlenses enhanced dual Nipkow disc confocal scanner, wide-view scanner unit. – optional - variable size of the pinhole, minimum one (evaluation parameter)	Dual pinhole, dual spinning disk
Digital phase-contrast imaging mode	Yes
Epifluorescence imaging mode with a minimum of three simultaneous color recording (evaluation parameter)	Yes
• Excitation by 390 nm (optimum +-20 nm) laser with minimum power 50 mW (evaluation parameter)	405nm, 100mW
• Excitation by 435 nm (optimum +-15 nm) laser with minimum power 75 mW (evaluation parameter)	445nm, 75mWY
• Excitation by 488 nm (optimum +-5 nm) laser with minimum power 50 mW (evaluation parameter)	488nm, 150mW
• Excitation by 561 nm (optimum +-5 nm) laser with minimum power 50 mW (evaluation parameter)	561nm, 150mW
• Excitation by 640 nm (optimum +-5 nm) laser with minimum power 40 mW (evaluation parameter)	640nm, 100mW
Laser power control in the minimum interval of 30-100 %	10-100%
UV illumination for epifluorescence	UV LED, 365nm
FRET imaging mode	Yes
minimum number of emission filters 6 (evaluation parameter)	6 emission filters supplied, 20 possible in total
emission filter for detection in the range 650 nm -760 nm	676/29nm
emission filter for detection in the range 570 nm -630 nm	600/37nm
emission filter for detection in the range 435 nm -515 nm	483/32
emission filter for detection in the range 435 nm – 480 nm	445/45nm
emission filter for detection in the range 500 nm -550 nm	525/50nm
emission filter for detection in the range 435 nm -550 nm	539/30nm



Laser autofocus mode based on the astigmatism method	Yes
Laser autofocus mode based on the confocality	No
Image-based autofocus mode	Yes
Six positions objective turret for automated change	Yes
• Objective lenses optimized for fluorescence in range 5x (permissible lens magnification tolerance is +-25 %) with minimum NA=0.16 (evaluation parameter)	4X, NA=0.16
Objective lenses optimized for fluorescence 10x (permissible lens magnification tolerance is +-20 %) with minimum NA=0.3 (evaluation parameter)	10X, NA=0.4
Objective lenses optimized for fluorescence 20x (permissible lens magnification tolerance is +-20 %) with minimum NA=0.75 (evaluation parameter)	20X, NA=0.75
• Objective lenses optimized for fluorescence 20x (permissible lens magnification tolerance is +-20 %) with minimum NA=1.0 water immersion (evaluation parameter)	20X Water, NA=1.0
• Objective lenses optimized for fluorescence 40x (permissible lens magnification tolerance is + -20 %) with minimum NA=1.0 water immersion (evaluation parameter)	40X Water, NA=1.0
Objective lenses optimized for fluorescence in range 60x (permissible lens magnification tolerance is +-20 %) with minimum NA=1.15 water immersion (evaluation parameter)	60X Water, NA=1.2
Water immersion objective lens system	Yes
• Live-cell chamber - minimum temperature range 35-40 °C, CO2 supply box 5% and humidifier	Yes
Supporting 6, 24, 96, 384, 1536 well plate format	Yes
Holder/adapter for microscopic slides	Yes
High-resolution scanning stage with minimum resolution 0.2 um	Yes
System control software	Yes
Dual monitor PC workstation for system control	Yes



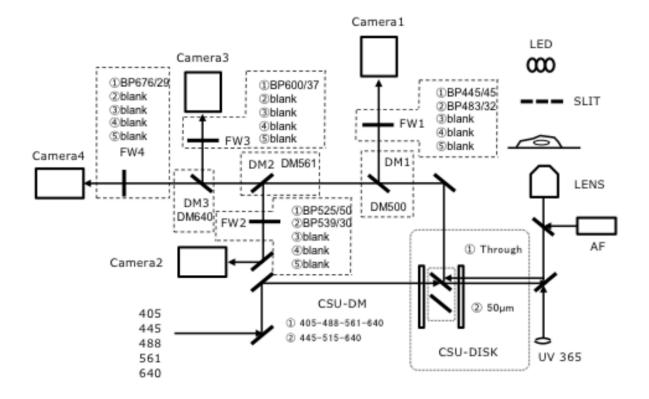
• Integration into the existing robotic platform for testing the biological activity of small molecules installed at the Institute of Molecular and Translational Medicine - HighResBiosolution. The integration must allow the prepared microscopy protocols to be run automatically using scripts that will be installed on the control unit controlling the robotic arms of the automated platform. The control must enable synchronization of the robotic plate feed, preparation of the plate holder, insertion of the plate, microscopy itself according to a defined method, ejection of the plate after microscopy, and removal of the plate by the robotic arm from the holder. The delivery must include all necessary hardware, such as tables and connection points for electricity, gases, liquids. This can be solved by supplying a docking station to allow the microscope to be connected to the necessary resources for operation.

Yes.
Integration to the
HighRes
Biosolutions
robotics platform
is arranged.



## 3.2 Optical Path – 4 Cameras, 5 Lasers, UV-LED

This shows the configuration of the cameras and filter wheels with filters and the UV-LED.



## 3.3 CV8000 Workstation

Control Workstation: DELL™ Precision T7920 (or equivalent model)
CPU clock Intel® Xeon®Processor (6 core, 3.4GHz)

Memory: 16GB

Graphics: nVIDIA Quadro K620 (2GB graphics memory)

HDD: System disk: 2TB

Data disks: 2 X 2TB

OS: Windows 10 Pro 64bit

Monitors: Dual 24" wide monitors, 1920 x 1200 Pixels

Network: Dual NIC Ethernet: 1GbE, 10GbE

(Table for monitors and keyboard is not included with the system and must be provided by the customer.)



# 4 YOKOGAWA CV8000 EXTENDED WARRANTY

This plan provides complete warranty coverage for the proper maintenance and support of the Yokogawa CV8000 system installed at the location specified.

All parts, labor (normal business hours) and travel expenses during the effective dates of the plan are covered.

## 4.1 Included Coverage

## i. Parts

All non-consumable parts and supplies, including cameras, lasers, lenses and electronics are covered by this service plan.

## ii. Labor

Labor for travel and service calls is included for repairs during normal working hours. Initial response with 48 hours of incident. Field service engineer will be on-site within 3 business days of the determined need for a service visit.

## iii. Software Updates

Updates to the latest version of the control software are provided during while the service contract is valid. There are typically two (2) software updates per year.

#### iv. New Plate Definitions

New plate definitions are provided during valid date of the service contract.

## v. Phone, Webex and Email Support

Unlimited phone support and on-site service requests are provided. Remote support is provided with the service contract.

#### vi. Preventative Maintenance

Preventive maintenance is provided with the service contract. There are two (2) preventative maintenance visits per year included (parts & labor).

#### vii. Response time

Response by phone or email within 24 hours of reported system issue.

On-site response within 72 hours. The best effort is made to have an engineer on site within 48 hours.



## 4.2 Excluded Coverage

## viii. Consumables

Tips, plates and reagents used with or in conjunction with the CV7000 are excluded from coverage under this plan.

## ix. Improper usage

Damage due to usage outside the recommended operational parameters of temperature, humidity, dust and location is excluded from coverage. Damage resulting from movement of the system or relocation of the system without written agreement from Wako Automation is excluded.

## x. Malicious Software Damage

Damage by malware and computer viruses is excluded.

## xi. Force Majeur

Damage due to, or arising from: fire, accident, acts of God, acts of public enemy, war or labor dispute is excluded from coverage.



## 4.3 Preventive Maintenance Schedule

Preventive maintenance is important to keep the CV8000 system functioning properly. The preventive maintenance applies to both the imaging functions and hardware.

Each Preventive Maintenance (PM) service requires access to the CV8000 for two (2) days. One (1) PM visit is scheduled annually.

# 4.4 Preventive Maintenance – Imaging Functions

Inspection and readjustment of the mechanisms and optics to maintain optimum performance.

Items	Contents
Update of software	Measurement software updates released 2X/year
Laser Power	Measurement and adjustment
Optics	Measure and adjust pixel registration gap
	between cameras
	Shading check
	Bright field check
XY Stage	Measure repeat precision of XY stage
Autofocus	Error curve test
Dispenser droplet	Measure with a chemical balance
volume*1	
Stage incubator	Measure temperature within the stage
	Confirm stability of CO <sub>2</sub>
Incubator	Measure temperature at 3 locations within the
	stage by precision thermometer
Horizontal placement	Confirm XY-stage inclines using a level
check	
Plate registration *2	Register additional plate types
Function check	Confirm software versions
	Run a single plate operation to confirm normal
	function



## 4.5 Preventive Maintenance - Hardware

Inspection of hardware, such as fan cleaning and utility supplies to prevent problems.

Items	Contents
Inner cleaning	Inner dusting, and inner cleaning of the incubator
External cleaning	Dusting of top roof and clean the fan
Optical parts	Clean optical parts such as mirrors and lenses
Wiring and tube	Connection check of all connectors
Drives	Grease up, if necessary
	Confirm coupling, positional sensors and limit
	sensors
Air supply	Check tubing and joints
Vacuum pickup	Filter cleaning
Ionizer	Electrode cleaning
Thermosensor	Confirm display values
Humidity sensor	Confirm display value
Exhaust fan	Confirm exhaust and exchange filter
Halogen lamp	Confirm power output
Workstation	Data cleaning of the hard disk
Power source	Confirm voltage, PE conduction and earth leakage
	breaker
Function check	Confirm software version
	Run a single plate operation to confirm normal
	function
Emergency stop	Confirm emergency stop operation

# 4.6 Customer Responsibilities

The customer is responsible for providing all materials and supplies for testing (if required). This includes microtitre plates, reagents, wash fluids, etc. Customer is also responsible for providing access to normal labware such a pipettes and balances.

The customer is responsible for operating the equipment according to the procedures outlined in the user manual.

The customer is responsible for providing internet access to the control workstation for remote sessions by TeamViewer or Webex for diagnostic and problem-solving purposes.



## 5 YOKOGAWA CV8000 SYSTEM PRICING

# 5.1 CV8000 System – 4 Cameras

## Includes:

- Four (4) sCMOS Cameras and Four (4) Excitation Lasers.
- FRET laser at 445nm
- UV-LED at 365nm
- Dual-pinhole (50 micron and 25 micron) dual spinning disk
- Incubated Stage for live cell imaging.
- Brightfield and Digital Phase Contrast.
- Wako Software Suite
- Installation and training, 12 months initial warranty plus 12 months extended warranty (24 months total warranty).

Item	Description	Price (KC)
1	Part A. Yokogawa CV8000 Imaging Platform	
2	sCMOS cameras, 4 units, Hamamatsu Orca Flash 4.0	
3	Laser Wavelength: 405, 488, 561 640nm, Excitation Lasers	
4	FRET laser: 445nm	
5	Brightfield and Phase Contrast Light	
6	UV LED at 365nm6	
7	Fully incubated stage with Heater, humidity and water immersion objective system	
8	Wako Software Suite with SearchFirst hit finding software for CV8000 platforms.	
9	Control Workstation with dual monitors, dual HDD and dual NIC configuration	
10	Dual pinhole spinning disk with both 50 micron and 25 micron pinholes.	
11	Sub-Total Base Platform	21,206,310 Kč
12	Part B. Objective Lens for CV8000	
13	X4 Dry (NA=0.16)	
14	X10 Dry (NA=0.40)	
15	X20 Dry (NA=0.75)	
16	X20 Water Immersion (NA=1.0)	
17	X40 Water Immersion (NA=1.0)	
18	X60 Water Immersion (NA=1.2)	
19	Sub-Total Objectives	744,180 Kč



20		
21	Part C: Integration into Existing Robotics Platform	
22	Integration of the CV8000 into the HighResBiosolutions robotic platform. This includes, setting up the device driver, adapt the database, teach the position and test the device through Cellario	716,531 Kč
23		
24		
25	Complete CV8000 Platform (Parts A + B + C)	
26	List Price Total Parts A & B (Includes installation and training)	22,667,020 Kč
27	Discount for current customer	-2,493,372 Kč
28	Net Price after discount	20,173,648 Kč
29	shipping	360,125 Kč
30	Sub-Total: CV8000 Platformn with shipping	20,533,773 Kč
31		
32	Part D: Extended Warranty	
33	Extended Warranty: Additional 12 months warranty added to initial 12 months (total warranty coverage 24 months)	2,266,702 Kč
34	Less Discount for purchsase with system	-226,670 Kč
35	Extended Warranty Total	2,040,032 Kč
36		
37	Platform Total: (Parts A+B+C+D)	
38	Total for CV8000 Platform	22,573,805 Kč
39	VAT at 21%	4,740,499 Kč
40	Total with VAT	27,314,304 Kč