



**OPTO-F1 UNIAMP
Accurate Oxygen
Quantification**



UNISENSE OPTO-F1 UNIAMP Accurate Oxygen Quantification User Manual

[Home](#) » [UNISENSE](#) » UNISENSE OPTO-F1 UNIAMP Accurate Oxygen Quantification User Manual 

Contents

- [1 UNISENSE OPTO-F1 UNIAMP Accurate Oxygen Quantification](#)
- [2 Product Information](#)
- [3 FAQ](#)
- [4 OVERVIEW](#)
- [5 GETTING STARTED](#)
- [6 OPERATING ENVIRONMENT](#)
- [7 SPECIFICATIONS](#)
- [8 Documents / Resources](#)
 - [8.1 References](#)



UNISENSE OPTO-F1 UNIAMP Accurate Oxygen Quantification



Specifications:

- Model: OPTO-F1 UNIAMP, OPTO-F4 UNIAMP
- Manufacturer: UNISENSE A/S
- Warranty: One-year warranty

Product Information

Congratulations with Your New Product!

If you encounter any problems or need assistance, contact our sales and support team.

Warranty and Liability:

The warranty covers the Opto-F1 and Opto-F4 UniAmp meters for one year.

Overview:

Front view of the Opto-F1 and Opto-F4 UniAmp meters.

Getting Started:

1. Install the SensorTrace Suite software from [here](#).
2. Connect the USB-C port of the meter to the USB port of the computer.
3. Connect the microoptodes and temperature sensors (optional).
4. Start the software following the SensorTrace Suite manual.
5. Calibrate and perform measurements as needed.

Operating Environment:

The Opto-F1 and Opto-F4 UniAmp meters are suitable for laboratory use. Protect the amplifiers from humid, dusty,

and corrosive environments to maintain performance and longevity.

FAQ

- **Q: What should I do if my equipment needs repair?**
 - A: If the equipment is not covered by warranty, contact Unisense for repair with applicable charges.
- **Q: Where can I find additional documentation and support?**
 - A: Visit www.unisense.com for further information and support resources.

CONGRATULATIONS WITH YOUR NEW PRODUCT

SuPPoRT, oRDERING, aND CoNTaCT INfoRMaTioN

If you wish to order additional products or if you encounter any problems and need scientific/technical assistance, please do not hesitate to contact our sales and support team. We will respond to your inquiry within one working day.

- E-mail: sales@unisense.com
- Unisense A/S
- Tel: +45 8944 9500
- Further documentation and support is available at our website
- www.unisense.com

WARRANTY AND LIABILITY

- The Opto-F1 and Opto-F4 UniAmp meters are covered by a one-year warranty.
- The warranty does not include repair or replacement necessitated by accident, neglect, misuse, unauthorized repair, or modification of the product.
- In no event will Unisense be liable for any direct, indirect, consequential or incidental damages, including lost profits, or for any claim by any third party, arising out of the use, the results of use, or the inability to use this product.

REPaIR oR aDJusTMENT

- Equipment that is not covered by the warranty will, if possible, be repaired by Unisense with appropriate charges paid by the customer. In case of return of equipment please contact us for return authorization.
- For further information please see the document General terms of sale and delivery of Unisense A/S as well as the manuals for the respective products. Repair or adjustment

OVERVIEW

The Opto-F1 UniAmp and Opto-F4 UniAmp are compact and economical meters for the Unisense Opto-series of microoptodes. The two meters are 1 and 4 channels, respectively, with a separate temperature channel for each optical channel. A temperature sensor is needed for automatic temperature-compensated oxygen measurements. The four-channel meter may be used with one temperature sensor for compensation of all four oxygen signals or with one sensor for each oxygen signal. The Opto-F series meters are USB-powered and fully integrated with the Unisense SensorTrace Suite software, allowing the combination of the microoptode technology with the broad

range of Unisense electrochemical microsensors (O₂, H₂S, NO, N₂O, H₂, pH, Redox and more).



Front view of the Opto-F1 and Opto-F4 UniAmp

GETTING STARTED

1. Install the SensorTrace Suite software. Newest version is available here:
http://www.unisense.com/Software_download/
2. Connect the USB-C port of the Opto-F1 or Opto-F4 UniAmp to the USB port of the computer
3. Connect the Opto-series microoptodes and the temperature sensors (optional)
4. Start the software (consult the SensorTrace Suite manual for directions)
5. The microoptode signal(s) are now visible on the computer screen and calibrations and measurements can be performed
6. The tip of the microoptode may flash red depending on the state of the SensorTrace Suite
 - a. Will flash once every 15 seconds if SensorTrace Suite is not logging or calibrating
 - b. Will flash when an experiment is running in SensorTrace Suite. The rate is determined by the "Sampling interval" setting in the software
 - c. Will flash during calibration (0.5 – 1 sec. intervals)

IMPORTANT: Please consult the separate manual for the Optoseries microoptodes for instructions about the microoptode and calibration of this.

OPERATING ENVIRONMENT


The Opto-F1 and Opto-F4 UniAmp meters are designed for laboratory use. Care must be taken to protect the amplifiers in humid, dusty, and corrosive environments (e.g. field conditions) since it may affect the performance, cause damage, or shorten the lifetime. If the amplifier is used outdoors, it should be protected in a plastic bag or similar.

SPECIFICATIONS

Sensor	Unisense Opto-series and Unisense Opto temperature sensor
Channels	1 or 4 (with individual temperature sensor for each oxygen sensor)
POWER	
Power supply	USB
Measuring principle	Lifetime red excitation with near infrared detection
DATA AQUISITION SOFTWARE	
SensorTrace Logger (freeware)	Included
Other Unisense software	Optional: SensorTrace Suite
Sampling interval	Adjustable 1 sec. to 60 sec.
Software data output	Excel and CSV
PHYSICAL	
Weight	1.5 kg
ENVIRONMENTAL	
Temperature range	-10 to +50°C (<90% rel. humidity, non-condensing)
Temperature compensation	Zero Noise Temperature Compensation
Pressure compensation	Integrated

- www.unisense.com
- sales@unisense.com

Documents / Resources

	<p>UNISENSE OPTO-F1 UNIAMP Accurate Oxygen Quantification [pdf] User Manual Opto-F1, Opto-F4, OPTO-F1 UNIAMP Accurate Oxygen Quantification, OPTO-F1 UNIAMP, Accurate Oxygen Quantification, Oxygen Quantification, Quantification</p>
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References

- [Microsensors, instruments, and meters to measure in microscale](#)
- [Software Download - Unisense](#)
- [User Manual](#)

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