

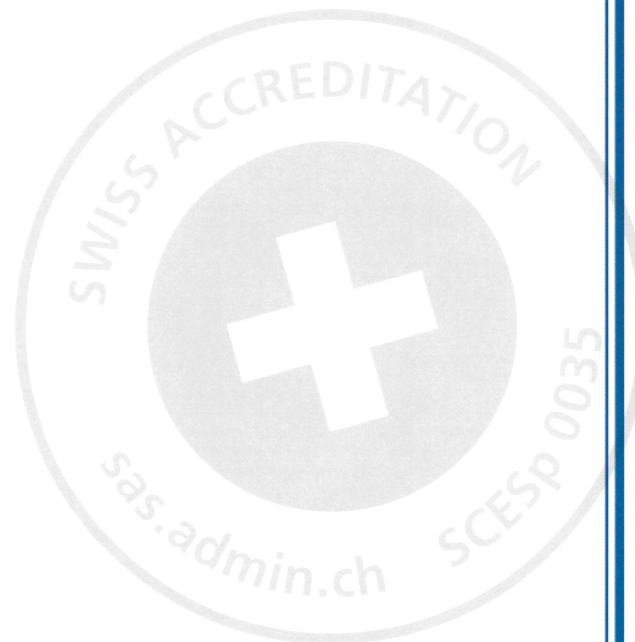


# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEX SEV 15.0013X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 6	Issue 5 (2021-02-18)
Date of Issue:	2021-04-08		Issue 4 (2019-11-14)
Applicant:	<b>Mettler-Toledo GmbH</b> Im Hackacker 15 8902 Urdorf <b>Switzerland</b>		Issue 3 (2019-07-30)
Equipment:	<b>Tunable Diode Laser Spectrometer GPro500</b>		Issue 2 (2018-04-20)
Optional accessory:	---		Issue 1 (2016-02-08)
Type of Protection:	<b>d, op, t</b>		Issue 0 (2015-11-16)
Marking:	Ex op is/[op is Ga] db IIC T6 Ga/Gb Ex op is/[op is Da] tb IIIC T80 °C Da/Db		



Approved for issue on behalf of the IECEx  
Certification Body:

**Martin Plüss**

Position:

**Manager Product Certification**

Signature:  
(for printed version)

Date:

2021-04-08

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Eurofins Electric & Electronic Product Testing AG**  
Luppenstrasse 3  
CH-8320 FEHRALTORF  
Switzerland



E&E



# IECEX Certificate of Conformity

Certificate No.: **IECEX SEV 15.0013X**

Page 2 of 4

Date of issue: 2021-04-08

Issue No: 6

Manufacturer: **Mettler-Toledo GmbH**  
Im Hackacker 15  
8902 Urdorf  
**Switzerland**

Additional  
manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

**IEC 60079-26:2014-10** Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga  
Edition:3.0

**IEC 60079-28:2015** Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation  
Edition:2

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[CH/SEV/ExTR15.0015/06](#)

Quality Assessment Report:

[CH/SEV/QAR12.0004/07](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX SEV 15.0013X**

Page 3 of 4

Date of issue: 2021-04-08

Issue No: 6

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Tunable Diode Laser Spectrometer GPro500 should be approved for measuring concentrations of the specified gases in gas mixtures. The sensor GPro500 consists of a flameproof enclosure and contains optical elements, optoelectronics (diode laser and silicon detectors), analog and digital electronics for signal processing and I/O structure. The sensor is driven by the M400 transmitter and communicates over RS485. The Sensor is connected to the process over a probe with process window and corner cube. Due to the process window the spectrometer has no direct contact to Zone 0 and can be disconnected during the running process.

### Ratings:

Supply circuit max. 24 V  
max. 5 W

### Optical Radiation:

Radiant power: max. 15 mW  
Irradiance: max: 5 mW/mm<sup>2</sup>

Classification of installation and use:	stationary
Ingress protection:	IP65
Rated ambient temperature range (°C):	-20 °C ≤ Ta ≤ +55 °C
Rated ambient temperature range (°C) for Ex Components	N/A

This CoC replaces IECEX SEV 15.0013X Issue No. 4

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- Repairs of the flameproof joints must be made in compliance with the constructive specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and 2 of IEC 60079-1.
- In the normal configuration, the temperature at the interface between the sensor head and the probe should not exceed +55 °C. The temperature at the interface to the sensor head is more than +55 °C, the temperature class T6 (85 °C) is exceeded.
- If the temperature exceeds +55 °C at the interface, a thermal barrier to limit the temperature to less than +55 °C has to be used in addition.
- The metal body of the TDL Spectrometer must be conductively connected with the equipotential bonding system of the Installation.





# IECEX Certificate of Conformity

Certificate No.: **IECEX SEV 15.0013X**

Page 4 of 4

Date of issue: 2021-04-08

Issue No: 6

**DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above)**

All previous addendums have been combined in a new file with current test reports and drawings.  
The new file with reference number 20CH-01571.X06 replaces all previous editions.

