CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Gentec Électro-Optique Inc.
Gentec Electro-Optics, Inc.
445 St-Jean-Baptiste, Suite 160
Quebec, Canada G2E 5N7

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 02 April 2023
Certificate Number: AC-2666

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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CALIBRATION

Valid to: **April 2, 2023** Certificate Number: **AC-2666**

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Calibration of Power Monitors by Electrical Simulation – Photodiode[1]	(0.1 to 0.99) µW (0.001 to 0.99) µA 1 µW to 1 W 1 µA to 20 mA	0.5 % of reading + 0.6*R* 0.25 % of reading + 0.6*R*	DC Current Source, 6 ½ Digit Digital Multimeter
Calibration of Power Monitors by Electrical Simulation[1,2]	500 nW to 30 kW 0.5 mV to 2.5 V	0.25 % of reading + 0. 6*R*	
Calibration of Energy Monitors by Electrical Simulation[1,2]	50 fJ to 7.5 kJ 0.5 mV to 2.5 V	0.25 % of reading + 0. 6*R*	

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Optical Power Meter – UP Series	Power and Sensitivity: (0.1 µV/W to 10 V/W) (0.5 to 500) W 1 064 nm & 10.6 µm (248 to 299) nm (300 to 2 200) nm (2 201 to 2 500) nm	 2.5 % of reading 3.8 % of reading 2.7 % of reading 7.9 % of reading	UV to FIR Laser Source, Monochromator, Laser Power Meter, Laser Power Meter Monitor, Reflectance Tiles, Spectrophotometer, Digital Multimeter

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Optical Power Meter – High Power	Power and Sensitivity: (15 µV/W to 15 V/W) 100 W to 10 kW 1 064 nm (248 to 299) nm (300 to 2 200) nm (2 201 to 2 500) nm (100 to 300) W 10.6 µm	 4 % of reading 4.9 % of reading 4.2 % of reading 8.5 % of reading 4.7 % of reading	Laser Source, Monochromator, Laser Power Meter, Laser Power Meter Monitor, Reflectance Tiles, Spectrophotometer, Digital Multimeter
Optical Power Meter – PH Series Si-HA	Power and Sensitivity: (5 mA/W to 2 A/W) 5 nW to 10 mW (350 to 399) nm (400 to 449) nm (450 to 809) nm (810 to 899) nm (900 to 1 009) nm (1 010 to 1 080) nm	 5 % of reading 2 % of reading 1.5 % of reading 2 % of reading 4 % of reading 7.5 % of reading	
Optical Power Meter – PH Series Ge and In	Power and Sensitivity: (5 mA/W to 2 A/W) 5 nW to 10 mW (800 to 1 049) nm (1 050 to 1 559) nm (1 560 to 1 650) nm	 5 % of reading 3.5% of reading 7 % of reading	
Optical Power Meter – PH Series Pronto-Si	Power and Sensitivity: (5 mA/W to 2 A/W) 5 nW to 10 mW (320 to 399) nm (400 to 449) nm (450 to 809) nm (810 to 899) nm (900 to 1 009) nm (1 010 to 1 100) nm	 6 % of reading 2 % of reading 1.5 % of reading 2 % of reading 4 % of reading 7.5 % of reading	

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Optical Power Meter – PH Series Si-UV	Power and Sensitivity: (5 mA/W to 2 A/W) 5 nW to 10 mW (210 to 229) nm (230 to 254) nm (255 to 399) nm (400 to 899) nm (900 to 1 009) nm (1 010 to 1 080) nm	 18 % of reading 8 % of reading 6.5 % of reading 2.5 % of reading 4 % of reading 7.5 % of reading	Laser Source, Monochromator, Laser Power Meter, Laser Power Meter Monitor, Reflectance Tiles, Spectrophotometer, Digital Multimeter
Optical Energy Meter – QE Series	Energy and Sensitivity: (0.1 V/J to 4 kV/J) 0.4 mJ to 150 mJ 1064 nm & 10.6 µm (248 to 299) nm (300 to 2 200) nm (2 201 to 2 500) nm 0.4 mJ to 150 mJ 10.6 µm	 2.6 % of reading 3.9 % of reading 2.8 % of reading 7.9 % of reading 2.8 % of reading	UV to FIR Laser Source, Monochromator, Laser power meter, Laser Power Meter Monitor, Reflectance Tiles, Spectrophotometer, USB Multifunction I/O Device
Optical Energy Meter – UP and Calorimeter Series	Energy and Sensitivity: (1 µV/J to 50 mV/J) 0.5 J to 2500 J 1064 nm & 10.6 µm (248 to 299) nm (300 to 2 200) nm (2 201 to 2 500) nm 0.5 J to 2500 J 10.6 µm	 3.4 % of reading 4.4 % of reading 3.6 % of reading 8.2 % of reading 5.7 % of reading	UV to FIR Laser Source, Monochromator, Laser power meter, Laser Power Meter Monitor, Reflectance Tiles, Spectrophotometer, USB Multifunction I/O Device
Optical Energy Meter – PE Series	Energy and Sensitivity: (0.1 V/µJ to 300 V/nJ) 10 pJ to 33 nJ (210 to 229) nm (230 to 254) nm (255 to 399) nm (400 to 899) nm (999 to 1 009) nm (1 010 to 1 080) nm	 18 % of reading 8 % of reading 6.5 % of reading 2.5 % of reading 4 % of reading 7.5 % of reading	

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

Notes:

1. *R* = resolution of unit under test.
2. Into loads from 100 kΩ to 1 MΩ.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2666.

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