



AbsoluT

AbsoluT is a high precision instrument for on-site temperature calibration of LayTec's in-situ devices MOCVD reactors with accessible viewport. It performs temperature calibration of EpiTT and EpiCurve® TT systems inside the MOCVD chamber through the original viewport and alignment. With AbsoluT you can reduce the maintenance time and increase the reactor up-time.

Features

Benefits for temperature measurements

AbsoluT eliminates differences in temperature measurements from reactor-to-reactor caused by reactor, viewport and window variations, as well as run-to-run variations and drifts caused by deposition on the viewport.

Delivery contents



- 1 Handheld device with the reference light source
- 2 Wrist loop to fix the device on your hand when you place it into the glove box chamber
- 3 Rechargeable battery pack
- 4 Temperature resistant cable
- 5 Battery charger
- 6 Tool case

All parts are clean room compatible!

Technical data

Reference light source

Reference light source	
Simulated calibration temperature*	870°C and 920°C (set by LayTec)
Accuracy of simulated calibration temperature	± 1 K
Lateral emission uniformity across the emitting area	± 0.2 K
Temperature noise	± 0.05 K
Temperature stability (long term drift)	< 0.015 K / h
Life-time of the light source according to manufacturer	10.000 h
Warm-up time	1 min
Operating time with fully charged battery pack	Approx. 8 h
Size (L x W x H)	130 x 96 x 80 mm
Weight	0.9 kg

*Re-calibration is recommended once a year

Rechargeable battery pack

Rechargeable battery pack	
Type	Li-ion battery LIB (environmentally sealed)
Capacity	3.4 Ah
Voltage	7.2 V
Life-time	150 charging cycles
Size (L x W x H)	110 x 60 x 40 mm
Weight	0.7 kg

Specifications of the battery charger

Battery charger	
Voltage	12 V
Current	1.6 A
Size (L x W x H)	70 x 50 x 50 mm

Operation conditions

	Operation	Storage
Temperature	+ 19°C ... + 30°C	- 10°C ... + 45°C
Max. humidity	50 %	< 80%

Availability

AIXTRON Close Coupled Showerhead® and Planetary® reactors equipped with LayTec devices with the temperature module TT (True Temperature) EpiTT, EpiTwin TT, EpiTriple TT, EpiCurve® TT.

AbsoluT can be also applied to other growth systems in which the lid can be opened allowing free access to the viewport.

EpiTT / EpiCurve® TT

The EpiCurve® TT product line combines wafer curvature measurements with all the features of the EpiTT product line: emissivity-corrected pyrometry and growth rate/thickness measurements by three-wavelength reflectance. This tool will help you avoid cracks, achieve flat wafers and control temperature homogeneity.

Global Network



We are the leading manufacturer of integrated optical metrology systems for all thin-film processes. LayTec systems can be customized for every specific process. For your specific application please contact LayTec directly or your local LayTec representative:

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www.challentech.com.cn

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Ceramic Forum Co. Ltd.*
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www.qesnet.com

* provide technical service as well

Specifications are subject to further technical development and may differ from those given in the data sheet. In certain cases, performance may be limited by reactor type and/or growth conditions. Please consult our technical sales team to see how LayTec metrology can best serve your specific application.

For further information please contact:

LayTec AG
Seesener Str. 10-13
10709 Berlin, Germany
Tel.: +49 (0)30 89 00 55-0
Fax: +49 (0)30 89 00 55-180
Email: info@laytec.de
Web: laytec.de



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