

AbsoluT 400

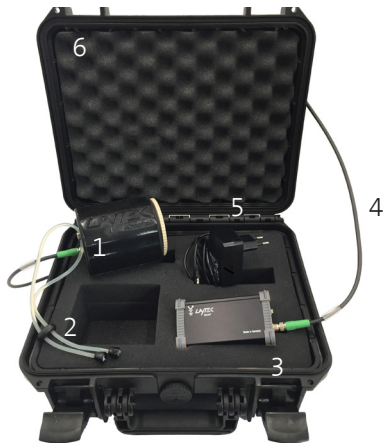
AbsoluT 400 is a high precision instrument for on-site temperature calibration of LayTec’s Pyro 400 in-situ device on MOCVD reactors with an accessible viewport. It performs temperature calibration of Pyro 400 systems inside the MOCVD chamber through the original viewport. With AbsoluT 400 you can reduce the maintenance time and increase the reactor up-time.

Features

Benefits for temperature measurements

AbsoluT 400 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 emitter	Reference light source	
Simulated calibration temperature*	950°C to 1000°C (set by LayTec)	
Accuracy of simulated calibration temperature	± 1 K	
Lateral emission uniformity across the emitting area	± 0.3K	
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

AbsoluT 400 is a temperature calibration tool which can be applied in AIXTRON AIX Planetary® and R6 reactors equipped with Pyro 400 in-situ systems. AbsoluT 400 can be also applied to other growth systems, in which the reactor lid can be opened allowing free access to the viewport.

Pyro 400

The Pyro 400 product line is designed for the compound semiconductor industry, especially for growth optimization and temperature control in LED and laser production, as well as for research and development. Pyro 400 measures optically the real wafer temperature during GaN buffer and multiple quantum well (MQW) growth on sapphire and SiC.

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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* 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.

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