



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, downtime and maintenance cycles can be significantly reduced.

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

- Handheld device with the reference light source
- Wrist loop for secure handling inside the glove box chamber
- Rechargeable battery pack
- Temperature resistant cable
- Battery charger
- Tool case

The delivery also contains:

- Replacement battery pack (optional)
- All parts are clean room compatible!

Technical data

Reference light emitter

Simulated calibration temperature	950 °C to 1000°C (set by LayTec)
Accuracy of the simulated calibration temperature indicated in the certificate	± 1 K
Lateral emission uniformity across emitting area	± 0.3 K
Warm-up time	15 min
Operating time with fully charged battery pack	aprox. 8 h
Size	L130 x W96 x H80 mm 5.12 x 3.78 x 3.15 inch
Weight	0.9 kg

Rechargeable battery pack

Type	Lithium polymer (environmentally sealed)
Capacity	3.2 Ah
Voltage	11 – 13 V
Life-time according to the manufacturer	100 – 150 charge cycles
Size	L180 x W75 x H34 mm 7.09 x 2.95 x 1,34 inch
Weight	0.7 kg

Wide range battery recharger

Charging mode	Constant current / constant voltage methode
Charging amperage	1 A, fixed
Charging time	Approx. 6 h
Supply voltage	100 – 240 V
Fusible cut-out	Blade-type fuse 5 A
Size	L142 x W142 x H42 mm 5.59 x 5.59 x 1.65 inch
Weight	0.52 kg

Operation conditions

	Operation	Storage
Temperature	+ 22 °C ... + 26 °C +71.6 °F... + 78.8 °F	- 10 °C ... + 45 °C +14 °F... + 113 °F
Max. humidity	50 %	< 80%

All parts are clean room compatible!

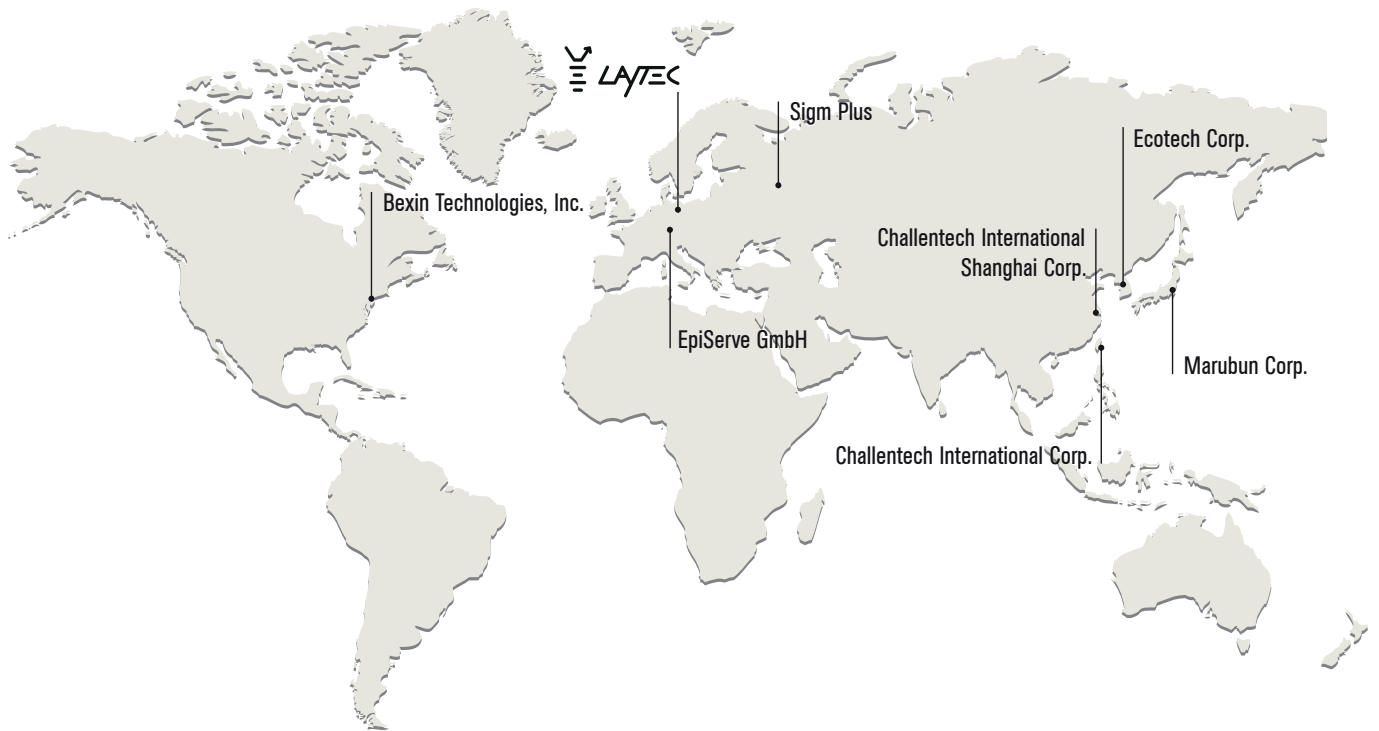
Availability

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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