

# SMF/CLC - CALIBRATION TOOL for SMF/PAPI

## FULLY ASSISTED OPERATIONS

SMF/CLC is a high precision laser level with USB connectivity and proprietary software that permits the automatic calibration of a SMF/PAPI instrument. Operator is step by step assisted by the system software during the calibration procedure

## RELIABLE OPERATION

SMF/CLC integrates a two parallel laser beams reference source able to automatically detect any calibration/alignment error in the instrument

## DOCUMENTATION

The system includes System Manual, Operating Manual, Software Manual. Test data report and Calibration Certificates

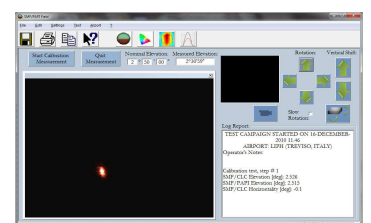
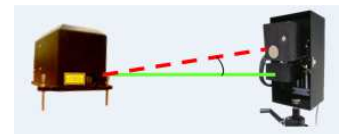
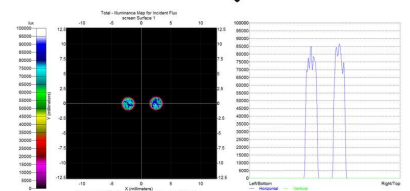
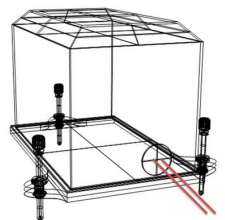
## TRAINING COURSE

A complete training course covers all the installing, operating, reporting and maintenance issues allowing the customer to reach the complete control of the instrument.



SMF Collimated Laser Calibrator (SMF/CLC) is the tool for calibrating the SMF/PAPI instrument during the Elevation and the Chromaticity/Intensity Tests. This instrument is a new generation laser level that guarantees the positioning of a laser beam with a stable and affordable inclination regarding the horizon. The accuracy of such elevation is below 15 arc-seconds at any environmental temperature to guarantee that the reference beam maintain the alignment with respect to the level of bench axis. The SMF/CLC optical beam elevation is measured by a high precision electronic inclinometer placed in the same frame of reference as the generated laser beam. SMF/CLC innovative optics permits the self-detection and diagnostic of any misalignment between the laser and the inclinometer of the calibration tool. Three external precision adjustment screws are used to position the SMF/CLC in horizontal position first and then to the requested elevation, while the current elevation and horizontality angles are provided in real time on the instrument display. A USB connection communicates with the same notebook provided with the SMF/PAPI instrument. The system software simultaneously detects the SMF/CLC elevation angle and horizontality as well as the SMF/PAPI instrument measurement results. On the basis of data received a new calibration record is created and updated into the SMF/PAPI instrument memory.

- Two steps semi automatic assisted procedure for SMF/PAPI calibration
- High precision laser level with USB connectivity
- Proprietary dedicated software
- Double-laser beam feature
- Calibration error: 10 arc-seconds
- Inclinometer non-linearity error:  $\leq 7$  arc-seconds
- Temperature drift error:  $\leq 8$  arc-seconds
- Self diagnostic automatic calibration evidence



## Characteristics



### AUTO DIAGNOSTIC

The system holds automatic diagnostic routines to check the instrument status

### TECHNICAL SUPPORT

Argos technical support assists customers during the whole system lifetime

In order to re-calibrate the SMF/PAPI, a 2 step automatic elevation test is required, measuring the laser beam at 3° and 6° approximately (proper values are displayed by the system software). The provided calibration software executes the tests automatically and calculates new calibration parameters for the SMF/PAPI instrument.

## Specifications

<b>Beam elevation range (continuous regulation)</b>	<b>0° to 10°</b>
<b>Accuracy on beam elevation</b>	±15 arc-seconds = 0.0052 deg
<b>Operating temperature</b>	+0 °C to +35 °C
<b>Storage temperature</b>	-10 °C to +70 °C
<b>Power supply</b>	110/220 V AC
<b>Power consumption</b>	less than 16 W
<b>Laser output</b>	Class II, visible red dot, 630 nm
<b>Pointing accuracy</b>	± 0.1 mm/m
<b>Dimensions</b>	295 x 230 x 165 mm
<b>Weight</b>	3 kg

For further information on our products and services please see our website:

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