

SUPSI

Collaborations: SUPSI with SPF & CSEM

**SUPSI Industry Day 2017 - PV Testing for quality
Campus Trevano 6th October 2017**

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Center for PV industry
innovation and quality testing

University of Applied Sciences and Arts
of Southern Switzerland
SUPSI

SPF INSTITUT FÜR
SOLARTECHNIK

Competence together

ISO 17025 accredited labs



University of Applied Sciences and Arts
of Southern Switzerland

SUPSI



New product development

- High accuracy flasher with spectral response for single and multi-junction measurement
- Optical inspections by visual, electroluminescence and thermography techniques
- Climatic and environmental chamber for accelerated aging tests (Humidity, UV, Thermal cycling)
- Mechanical load test up to 14000 Pa on module (up to 30° inclination) and structures, hail test up to 60 mm
- Material characterization (peeling, adhesion, shear test, rheological properties of material)

Support in product selection

- Evaluation of the documentation by IEC technical experts
- Material analysis
- Preparation of customised accelerated tests to reproduce major failures (35 years of experience on the field)

PV plant evaluation

- Module, string and PV plant measurements metrologically aligned with ISO 17025 accredited SUPSI PVLab
- Visual inspection with digital portable microscope up to 400x
- Use of MBJ mobile flasher (in cooperation with SPF Rapperswil):
 - › Performance measurement
 - › Electroluminescence
 - › Dry and wet insulation measurement
 - › Bypass diode verification

