

**NEW**

**FLUKE®**

# SMFT-1000 Solar Multifunction PV Tester, Performance Analyser and I-V Curve Tracer



## Your new all-in-one test solution to verify PV system performance and safety

The Fluke SMFT-1000 Solar Multifunction PV Tester with I-V curve tracing helps you test that photovoltaic (PV) systems are performing to their optimal power output and are operating safely. Designed for PV professionals who provide installation, commissioning, and maintenance services on solar systems that operate at 1000 V DC or under, the Fluke SMFT-1000 provides a complete PV testing solution that conforms to IEC 62446-1 standards. Using Fluke's TruTest™ software, measurement data from solar site installation and commissioning testing can be seamlessly imported, organised, and analysed for effortless reporting – all without needing to bring a laptop on-site.

## CRITICAL TESTING FEATURES FOR THE PERIODIC INSPECTION OF PV SYSTEMS

### Full sequence safety testing –IEC 62446-1 Category 1:

- Protective resistance earth (RLO/RPE)
- Voltage on open circuit, including polarity (VOC)
- Short circuit current (ISC)
- Insulation resistance (RINS)

### System performance testing –IEC 62446-1 Category 2:

- I-V Curve tracing and analysis with TruTest™ software
- Irradiance, temperature, tilt, and cardinal direction

## Accurate I-V curve measurements with the included Wireless Irradiance Meter

### No leads required

To perform precise I-V curve measurements, real-time irradiance and temperature data is needed. The included Fluke IRR2-BT Irradiance Meter wirelessly connects to the SMFT-1000 to communicate data in real-time, providing the most accurate I-V curve measurements possible. If the wireless connection is interrupted for any reason, the IRR2-BT will continue recording data locally for up to 17 hours which can later be matched to tests taken with the SMFT-1000.



## Included with the product

### FLK-SMFT-1000/KIT:

Fluke SMFT-1000-BP Professional Tool Backpack, Fluke SMFT-1000 Multifunction PV Analyser (including carry strap, fuse pack, adapter cable IRDA optical-to-USB, and zero adapter), Fluke IRR2-BT Wireless Solar Irradiance Meter Pro (including Fluke 8OPR-IRR External Temperature Probe, mounting bracket for solar panel, and carry case), Fluke i100 AC/DC Current Clamp 100 A (including a Fluke TPAK Magnet Magnetic Meter Hanger), Fluke TP1000 Test Probe with Remote Test Button, Fluke TL1000 Test Lead Set, Fluke TL1000-MC4 Test Lead Set, Fluke TL1000/30M Test Lead on Reel, coupler set, and (6) AA Batteries.

### FLK-SMFT-1000/PRO:

Fluke SMFT-1000-BP Professional Tool Backpack, Fluke SMFT-1000 Multifunction PV Analyser (including carry strap, fuse pack, adapter cable IRDA optical-to-USB, and zero adapter), Advanced TruTest™ software, MC4 Solar Clamp Test Lead Set, Fluke IRR2-BT Wireless Solar Irradiance Meter Pro (including Fluke 8OPR-IRR External Temperature Probe, mounting bracket for solar panel, and carry case), Fluke i100 AC/DC Current Clamp 100 A (including a Fluke TPAK Magnet Magnetic Meter Hanger), Fluke TP1000 Test Probe with Remote Test Button, Fluke TL1000 Test Lead Set, Fluke TL1000-MC4 Test Lead Set, Fluke TL1000/30M Test Lead on Reel, coupler set, and (6) AA Batteries.

### Recommended tools for use with the SMFT-1000

- TruTest™ Data Management and Reporting Software
- Fluke 393 FC CAT III 1500 V Solar Clamp Meter
- Fluke 87V MAX True-RMS Digital Multimeter
- Fluke 1587 FC Insulation Multimeter
- Fluke Ti480 PRO Infrared Camera
- Fluke 1625-2 GEO Earth Ground Tester
- Fluke 500 Series Battery Analysers
- Pomona PVLEAD3 MC4 Solar Clamp Test Lead Set



Part No.	Description
FLUSMFT-1000/KIT	Multifunction PV Analyser with Probe Kit
FLUSMFT-1000/PRO	Multifunction PV Analyser with Trutest & Leads
FLUTRUTEST-LITE	Trutest Software License - Lite
FLUTRUTEST-ADV	Trutest Software License - Advanced