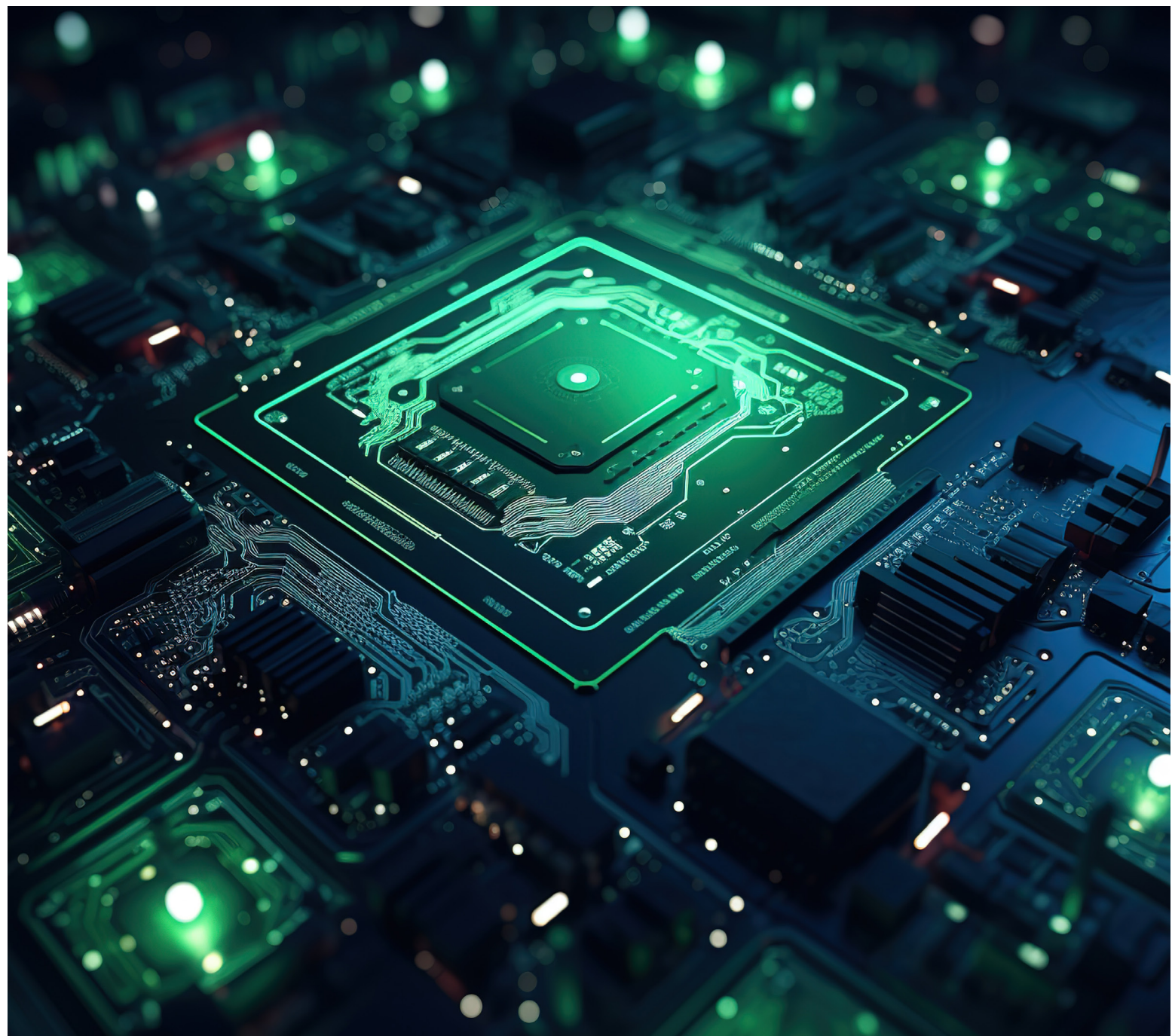
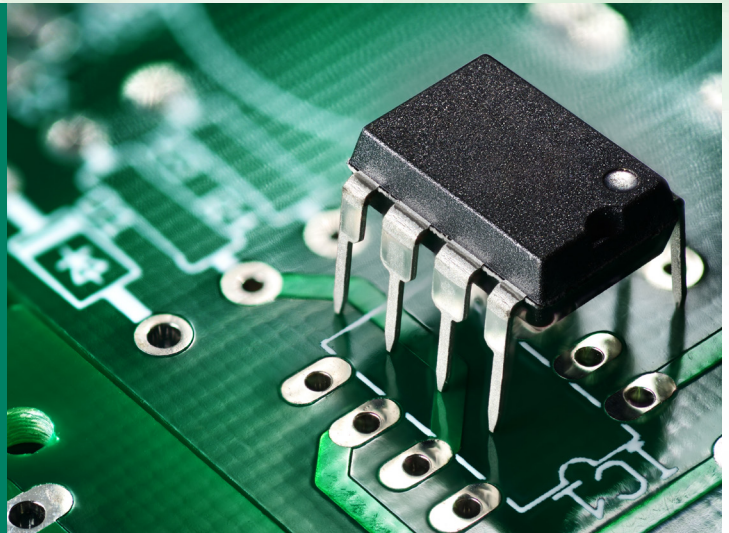


EMC PARTNER APPLICATIONS
Semiconductors

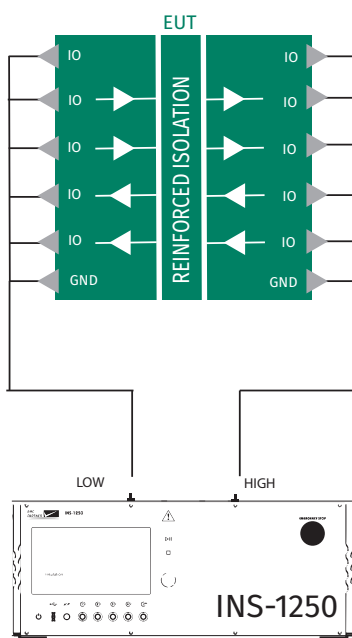


SEMICONDUCTORS



High voltage opto isolators provide high voltage isolation between circuit elements, allowing control signals to be transferred but blocking AC or DC power. Electronic devices and semiconductor ICs used for insulation are called isolators. This insulation is required to prevent electrical shock to human operators and preventing damage to processors. One of the critical parameters that are tested according to standards like IEC 61747-5-5 and IEC 61747-17 is VIOSM. EMC PARTNER provide specialized solutions to perform isolation tests up to 30kV that improve semiconductor reliability.

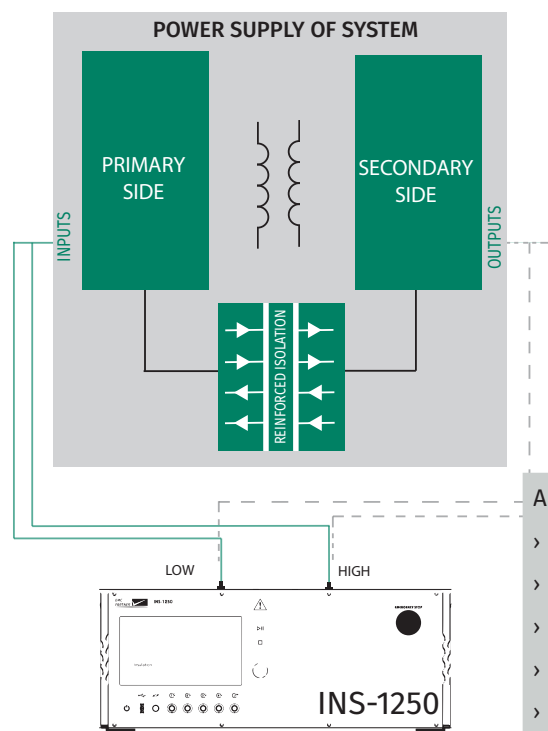
APPLICATION 1: TEST SETUP ON COMPONENT LEVEL



Applied Standards:

- › IEC 60747-17
- › IEC 60747-5-5
- › VDE 0884-17
- › UL 1577

APPLICATION 2: TEST SETUP ON SYSTEM LEVEL



Applied Standards:

- › IEC 60335-1
- › IEC 60601-1
- › IEC 61010-1
- › IEC 61851-23
- › IEC 60664-1

Test types

- › 1.2/50μs, maximum surge insulation voltage (V_{IOSM})



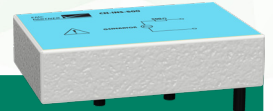
INS-1250

Impulse insulation tester 1.2/50 μ s from 500V to 30kV. Breakdown detection at generator or test object. Report generation and control from colour touch panel and 40 Ohm impedance. Ready for Semiconductor testing / IC testing.



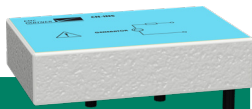
MIG1203 / MIG1803 / MIG2403

1.2/50 μ s lightning impulse generator up to 24 kV with 40 Ohm impedance. High voltage outputs on top plate protected by TC-ST test cabinet.



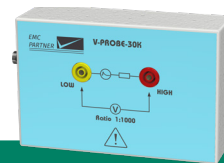
CN-INS-500

With this external box the system impedance can be easily adjusted to 500 Ohm by the customer.



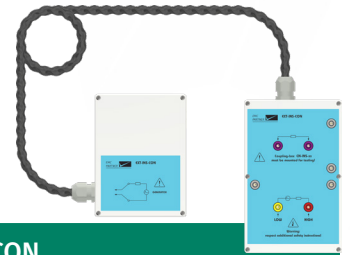
CN-INS-X

Selectable output impedance for INS-1250 generators. The impedance range is from 40 ohm up to 4 kohm.



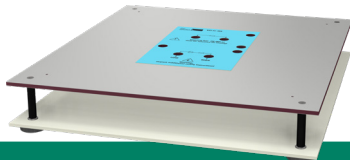
V-PROBE-30K

External high voltage probe for pulse measurement with a divider ratio of 1:1000 that can be directly connected to your oscilloscope (1 MOhm input).



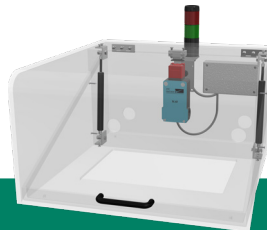
EXT-INS-CON

Two meter long extension for the remote connection of the EUT. The pulse also meets all technical specifications at the output of the extension and can be calibrated accordingly.



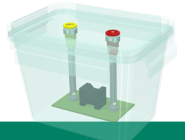
EXT-TC-INS

Base for mounting the TC-ST together with the EXT-INS-CON away from the generator.



TC-ST

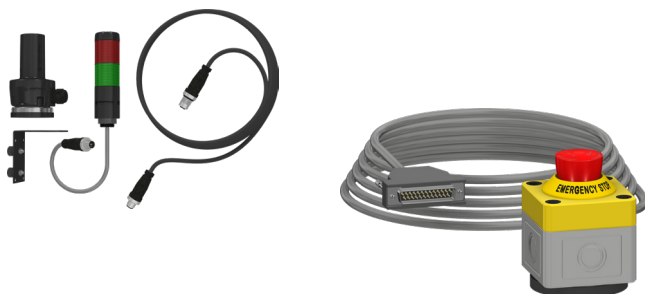
Test cabinet Mounted on top of the generator for EUT with maximum dimensions 20 X 20 x 30cm. Can be used together with generators up to 30kV. Electro-mechanical locking mechanism to prevent opening during test.



INS-SOP8-36

Adapter set for small outline package semiconductors with simple connection to INS-1250. Including a plastic oil bath 0.7L and adapter board for up to 44 PIN.

MORE OPTIONS & COMFORT



- > WARNING LAMP
- > EMERGENCY-STOP

TEMA3000 - SOFTWARE TEST SUITE



Create and manage tests and sequences. Integrate DSO measurements in professional reports. Import and export Test Setups and Sequences. Smart test functions and predefined Test Library.



APPLICATION
INFORMATION

- > FURTHER INFORMATION ABOUT THE APPLICATION PROTECTION RELAY ON WWW.EMC-PARTNER.COM/APP-SEMICONDUCTORS

For further information please do not hesitate to contact your local EMC PARTNER AG representative.
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