



**TEST AND MEASUREMENT EQUIPMENT CLASSIFICATION FOR:
IEC 61326-1:2012, EDITION 2.0
ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE
EMC REQUIREMENTS - PART 1: GENERAL REQUIREMENTS**

- “R” Required
- “S” Test that may be subcontracted (see OD 2012)
- “W” Test that may be witnessed at a CTF, another CBTL, or an outside subcontractor
- “SP” Test that may be performed at a Specialized Testing Facility (SPTL - see IECEE 02-2)

Clause	Test / measurement to be performed	Testing / measuring equipment / material needed	Equipment Classification
6	Immunity test to electrostatic discharges (IEC 61000-4-2)	ESD simulator, Horizontal coupling plane, Vertical coupling plane, GRP, Discharge electrode(for air discharges and direct discharges), Discharge return cable, bleeder resistors, Insulating support	R
6	Immunity test to Radiated Electromagnetic field (IEC 61000-4-3)	Signal generator, RF power amplifier, Function generator, Biconical antenna and logperiodic antenna or Bilog antenna, Horn antenna, Millivoltmeter (or Power Meter with Power Sensor), Isotropic Field Probe, Directional coupler, Anechoic chamber or Semi-Anechoic chamber, RF Coaxial Cable, Controller (e.g. PC and Controller software)	R



Clause	Test / measurement to be performed	Testing / measuring equipment / material needed	Equipment Classification
6	Immunity test to power frequency magnetic fields (IEC 61000-4-8)	Test Generator, Square Coil and/or Rectangular Coil and/or other inductive Coil e.g. Helmholtz Coil; Magnetic Field Probe	R
6	Immunity test to power frequency magnetic fields (IEC 61000-4-8)	Magnetic field tester	S
6	Immunity test to voltage dips, voltage variations and short interruptions (IEC 61000-4-11)	Test generator	R
6	Immunity test to voltage dips, voltage variations and short interruptions (IEC 61000-4-11)	Three phase selector	S
6	Immunity test to Fast transients (IEC 61000-4-4)	Burst Generator, Coupling/Decoupling Network, Capacitive Clamp, 33 nF capacitor for direct injection, RGP, Interconnection Cable (for Clamp to Generator)	R
6	Immunity test to Surges (IEC 61000-4-5)	Surge generator, coupling/decoupling network, reference ground plane	R
6	Immunity test to continuous conducted disturbances (IEC 61000-4-6)	Signal generator, RF power amplifier, Coupler, Coupling/decoupling network, RF Coaxial Cable, Attenuator, Power meter with Power Sensor or Spectrum Analyzer, EM clamp, Current clamp, 100Ω to 50Ω adaptor and direct injection device, RGP, clamp test jig	R

Clause	Test / measurement to be performed	Testing / measuring equipment / material needed	Equipment Classification
6	Immunity test to continuous conducted disturbances (IEC 61000-4-6)	Decoupling network, Decoupling device, 50Ω Termination, EMI Filter, Artificial hand	S
7.2	EMISSION-Measurement of conducted disturbances on the mains, Measurement of Radiated disturbances (CISPR 11 – see also EQL)	Receiver or Spectrum analyzer + Preselector + QP adapter (CISPR 16-1-1:2006 +A1:2006 + A2:2007 (Ed 2.2) compliant), AMN, RF Coaxial Cable, RGP, Biconical Antenna and Logperiodic antenna or Bilog antenna, RF Coaxial Cable, Semi- anechoic chamber or Open area test site	R
7.2	EMISSION-Measurement of conducted disturbances on the mains, Measurement of Radiated disturbances (CISPR 11 – see also EQL)	High Pass Filter, Attenuator; RF Amplifier	S
7.2	EMISSION-Measurement of harmonics (IEC 61000-3-2)	Power source, harmonic meter	R
7.2	EMISSION-Measurement of flickers (IEC 61000-3-3)	Power source, flicker meter, Reference impedance network	R
7.2	EMISSION-Limits for harmonics currents produced by equipment connected to public low-voltage systems whit input current > 16 A and inferior or equal 75A per phase (IEC 61000-3-12)	Power source, Harmonic meter	S



Clause	Test / measurement to be performed	Testing / measuring equipment / material needed	Equipment Classification
7.2	EMISSION-Limitation of voltage changes, voltage fluctuations and flicker in public low voltage supply system-equipment with rated current < or equal 75A and subject to conditional connection (IEC 61000-3-11)	Power source, flickermeter, Reference impedance network	S