Magnetic-Field Test System / Low-Frequency Test System for Emission and Immunity Tests / MTS-800

Options

- Common mode test adapter for balanced signal and control connections according to IEC/EN 55103-3
- Calibration network for common mode test adapter according to IEC/EN 55103-2
- Current transducer for balanced video connections according to IEC/EN 55103-2
- Enclosed variable transformer for short term field according to IEC/EN 61000-4-8; prim. 230 V, sec. 0 to 230 V, max. current 20 A; incl. supply cable

Radiating loop RL_120

Helmholtz Coils

Several Helmholtz coils are available for susceptibility tests. We also offer tri-axial Helmholtz coils which are suitable for MTS-800. To achieve 1000 A/m at 1 kHz, it is absolute necessary to use our Helmholtz coils and an optional compensation board.

Helmholtz coil HCS_50/28_TAP with loop sensor RLS_133

Triaxial Helmholtz coil HCST_50/28_TAP

Loop sensor LS_40

Coil-Type	Technical specifications
HCST_50/28_TAP	Tapped triaxial Helmholtz coil for immunity tests
HCS_50/28_TAP	Tapped single axis Helmholtz coil for immunity tests
	Designed for the generation of magnetic fields with field strength > 1000 A/m
HCS_125/75_TAP	Tapped single axis Helmholtz coil for immunity tests according to IEC/EN 55103

Loop Sensors / Radiating Loops

For immunity tests we offer radiating loops which are necessary to generate magnetic fields. The required loop sensors for measuring emission can also be ordered.

Loop sensor LS_133

Coil-Type	Technical specifications
RL_120	120 mm radiating loop according to MIL-STD-461E
LS_040	Electrostatically shielded loop sensor according to MIL-STD-461E
LS_133	Electrostatically shielded loop sensor according to MIL-STD-461E
RLS_133	Electrostatically shielded loop sensor according to IEC/EN 55103-1/2
	Can be used as radiating loop and loop sensor

Coupling Transformer

MIL-STD-461E CS 101 requires a coupling transformer for conducted susceptibility tests. Frankonia has developed a coupling transformer which meets all requirements. Due to direct coupling to voltage mains, the coupling transformer has an additional differential amplifier for common mode rejection of the AC mains. Using the coupling transformer without this amplifier can destroy any measurement instrument due to overvoltage.

Coupling transformer CT 2.5/50 AC with differential amplifier