

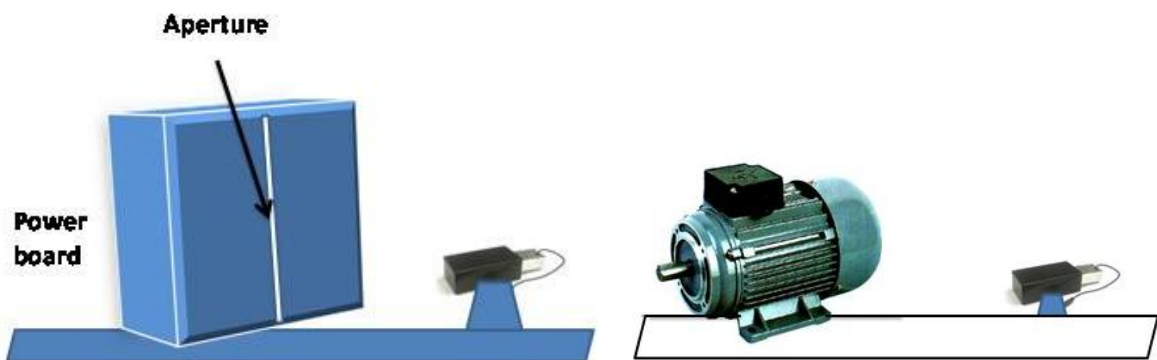
TEM Antenna

TEM antenna is a partial discharge sensor designed to receive electromagnetic (EM) emissions from a PD occurring in the monitored asset (like MV switchgears or LV and MV induction motors fed by power electronic impulses). It is a broadband antenna with a flat response which makes TEM suitable in a number of different applications. It has been optimized to operate in a frequency range typical for PD activity and it was designed to provide maximum sensitivity and high gain. Its compact and robust design (passive sensor) makes TEM the optimal sensor for direct installation on medium voltage Switchgears and motors. It can be virtually applied in any electrical equipment provided that it has apertures or EM transparent surfaces. Contact our sales department for consulting.



Optionally amplifiers and signal conditioning devices are available by Techimp to further improve sensitivity

TEM Installations Specifications



Power Boards: TEM Antenna is preferably positioned in the nearby of a Power boards apertures with the antenna aperture facing the aperture itself.

Motors: TEM antenna can be positioned in close proximity of the motor. Virtually any opening or surface of the electrical equipment, provided it is EM transparent, can be used.

TEM Technical Specifications

Property	Value
Bandwidth:	100MHz – 3GHz, stand alone sensor Techimp Frequency Shifter recommended (with PDCheck)
Gain:	1.8-4.25 dBi
Typical VSWR:	5:1
3dB Beam width:	100° - 210°
Polarization:	Linear
Impedance:	50 Ohm
Overall Dimensions:	80 x 150 x 50 mm
Weight (without the RF cable):	250 g
Connector:	Type N
Power Supply:	Only for optional devices (frequency shifter)
Installation:	In proximity of EUT apertures
Operational limits:	Env. Temp: -20-65 ⁰ C; Env. RH: 0-100%

TEM Antenna Gain profile