



In the Military Communication Institute Laboratory there are:

- Electromagnetic Compatibility (EMC) Laboratory
- Environmental Testing Laboratory



MCI Laboratory has accreditation of:

- Polish Centre for Accreditation (AB 149)
- Military Centre for Quality Normalization and Codification in the field of national defense and security (11/MON/2011)
- Certificate of Approval from SKW (6/2011/JC SKW)



ECM Laboratory is equipped with two cabins: echoic one sized 10 m x 7 m x 2.5 m (L x W x H) and anechoic one 20 m x 16 m x 8 m (L x W x H). Dimensions of the anechoic cabin allow carrying out tests of large objects, such as buses, which makes the Laboratory tests offer unique in the scale of the whole country. Tests of the stationary objects and low mobility objects can be carried out also in the place of their operation.

Equipment of the MCI Laboratories, competency and long lasting experience of its employees in the field of EMC, protection against electromagnetic penetration of information and environmental tests (the Laboratories maintain accreditation since 1996) allow carrying out measurements in the field of:

a) Electromagnetic Compatibility (EMC)

NO-06-A500:2008, NO-06-A200:2008

- PRE-01 Radiated emissions, Magnetic field, 30 Hz ÷ 100 kHz
- PRE-02 Radiated emissions, Electric field, 10 kHz ÷ 18 GHz
- PCE-01 Conducted emissions, Power cables, 30 Hz ÷ 10 kHz
- PCE-02 Conducted emissions, Power cables, 10 kHz ÷ 10 MHz
- PCS-01 Conducted emissions immunity, 30 Hz ÷ 150 kHz
- PCS-06 Conducted emissions immunity, 10 kHz ÷ 200 MHz
- PRS-02 Radiated emissions immunity, 10 kHz ÷ 1 GHz

PN-EN 61000-4-2:1999/A2:2003

- Electrostatic discharges (ESD) immunity

PN-EN 55012:2005

- Electromagnetic disturbances, 30 MHz ÷ 1 GHz

b) Attenuation of shielding objects

(NO-06-A501:2009, NO-06-A201:2009)

c) Attenuation of filters (PN-CISPR 17)

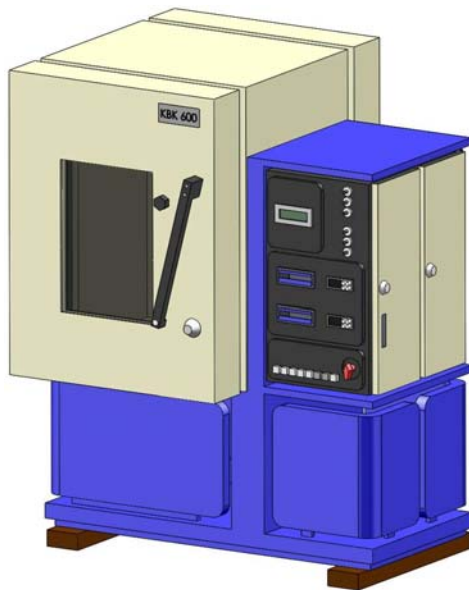
d) Protection against electromagnetic information penetration

(BTO-701B, SDIP-27)



e) Environmental and mechanical conditions influences immunity

- Immunity against resonances appearing in device constructions (NO-06-A107:2005 p. 4.4, NO-06-A502-4, AECTP 300:2001)
- Resistance to ambient temperature changes (thermal shock) from -60°C to +95°C (NO-06-A107:2005 p. 4.5, NO-06-A502-4, AECTP 300:2001)
- Total immunity against increased humidity (damp heat) up to +98 % (NO-06-A107:2005 p. 4.4, NO-06-A502-6, AECTP 300:2001)
- Total immunity against decreased ambient temperature (low temperature) down to -60°C (NO-06-A107:2005 p. 4.3, NO-06-A502-3, AECTP 300:2001)
- Immunity against condensational atmospheric deposits (NO-06-A107:2005 p. 4.10)
- Total immunity against increased ambient temperature (high temperature) up to +95°C (NO-06-A107:2005 p. 4.2, NO-06-A502-2, AECTP 300:2001)
- Resistance to and total immunity against transportation (NO-06-A107:2005 p. 2.10)
- Resistance to and immunity against sinusoidal vibrations (NO-06-A107:2005 p. 2.3)



Taking into consideration permanent increase in customer requirements and, first of all, need for complex attendance in single location, we systematically expand the scope of tests carried out by MCI Laboratory. Soon we will be capable to test to further procedures contained in NO-06-A500:2008 standard:

- PCS-05 Conducted emissions immunity, Structure currents, 60 Hz ÷ 100 kHz
- PRS-01 Radiated emissions immunity, Magnetic field, 30 Hz ÷ 100 kHz



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