
Scope of Accreditation

Accredited conformity assessment body:

**IDVORSKY LABORATORIES –Company for Testing, Inspection and Certification Ltd.
Serbia, Belgrade, Volgina 15**

Standard:

SRPS ISO/IEC 17025:2017 (ISO/IEC 17025:2017)

Short description of the scope:

- **Testing of electromagnetic compatibility**
- **Electrical and electronic testing of radio telecommunication equipment**

Disclaimer:

*This is unofficial translation in English of the original Scope of Accreditation of Idvorsky Laboratories **valid from 25/12/2019** in Serbian that can be found in the Registar of accredited bodies, Accreditation Board of Serbia (www.ats.rs/en): <http://www.registar.ats.rs/predmet/940/>*

Detailed scope of accreditation:

Test site: in laboratory Electromagnetic compatibility testing (EMC)				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
1.	Information technology equipment (IT)	Emission testing	up to 2.7 GHz 3m distance	SRPS EN 55022:2011 <i>-новучен</i> (EN 55022:2010 <i>- withdrawn</i>)
		Immunity testing		SRPS EN 55024:2011 + A1:2015 (EN 55024:2010+ A1:2015)
2.	Sound and television broadcast receivers and associated equipment	Emission testing	up to 2.7 GHz	SRPS EN 55013:2014+A1:2017 <i>-новучен</i> осим тачке 4.3 (EN 55013:2013 +A1:2015 <i>- withdrawn</i> except Clause 4.3)
		Immunity testing		SPRS EN 55020:2011 т. 5.5, 5.6, 5.9 (EN 55020:2007 с. 5.5, 5.6 and 5.9)
3.	Household appliances, electric tools and similar apparatus	Emission testing		SRPS EN 55014-1: 2010 + A1:2010 +A2:2012 осим тачке 4.2, 5.1.3 и 6 (EN 55014-1:2006 + A1:2009 + A2:2011 except Clauses 4.2, 5.1.3 and 6)
		Immunity testing		SRPS EN 55014-2:2015 (EN 55014-2:2015)
4.	Electrical lighting and similar equipment	Voltage disturbance testing at mains and control terminals	9 kHz - 30 MHz	SRPS EN 55015:2014 +A1:2015 (EN 55015:2013 +A1:2015)
		Radiated disturbance testing	30 MHz - 300 MHz (CDN up to 230 MHz)	
		Immunity testing		SRPS EN 61547:2012 (EN 61547:2009)
5.	Industrial, scientific and medical (ISM) equipment	Emission testing	up to 2.7 GHz 3m distance	SRPS EN 55011:2017 (EN 55011:2016)
6.	Audio, video, audio-visual and entertainment lighting control apparatus for professional use	Immunity testing		SRPS EN 55103-2: 2010 изузов Анекса А (EN 55103:2009 except Annex A)
7.	Low voltage power supplies	EMC testing (emission, immunity)		EN 61204-3:2010 изузов табеле 3-3 (EN 61204-3:2000 except Table 3-3)

Test site: in laboratory Electromagnetic compatibility testing (EMC)				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
8.	Electrical equipment for measurement, control and laboratory use	EMC testing (emission, immunity)	up to 2.7 GHz 3m distance / emission	SRPS EN 61326-1:2013 (EN 61326-1:2013) SRPS EN 61326-2-1:2008 (EN 61326-2-1:2013) (SRPS EN 61326-2-2:2013 (EN 61326-2-2:2013)
9.	Alarm systems	Immunity testing	Table 4 excluding pulse modulation	SRPS EN 50130-4:2012 (EN 50130-4:2011)
10.	Uninterruptible power systems (UPS)	EMC testing (emission, immunity)		SRPS EN 62040-2:2010 (EN 62040-2:2006)
11.	Telecommunication network equipment	EMC testing (emission, immunity)	up to 2.7 GHz 3m distance / emission	SRPS EN 300 386 v1.6.1:2015 изузов Анекса А (EN 300 386 v1.6.1:2012 except Annex A)
12.	Radio equipment and services	EMC testing (emission, immunity)	up to 2.7 GHz 3m distance / emission	SRPS EN 301 489-1 v1.9.2: 2012 (EN 301 489-1 v1.9.2:2011)
13.	Electricity metering equipment (AC)	EMC testing (emission, immunity)	Burst up to 2 kV (EN 61000-4-4)	SRPS EN 62052-11:2009 т. 7.1 и 7.5 без 7.5.7 (EN 62052-11:2003 c.7.1 and 7.5 exc. 7.5.7)
14.	Arc welding equipment	EMC testing (emission, immunity)	Monophase supply up to 16A (for c. 6.3.4)	SRPS EN 60974-10:2009 +A1:2017 (EN 60974-10:2014 +A1:2015)
15.	Programmable controllers (PLC)	EMC testing (emission, immunity)	3m distance / emission	SRPS EN 61131-2:2010 (EN 61131-2:2007)
16.	Road traffic signal systems	EMC testing (emission, immunity)	3m distance / emission	SRPS EN 50293:2013 (EN 50293:2012)
17.	Machine tools	Emission testing	3m distance / emission	SRPS EN 50370-1:2008 (EN 50370-1:2005)
		Immunity testing		SRPS EN 50370-2:2008 (EN 50370-2:2003)
18.	Home and Building Electronic Systems	EMC testing (emission, immunity)		SRPS EN 50491-5-1:2011 (EN 50491-5-1:2010) SRPS EN 50491-5-2:2011 (EN 50491-5-2:2010) SRPS EN 50491-5-3:2011 (EN 50491-5-3:2010)
19.	Medical electrical equipment	EMC testing (emission, immunity)	up to 2.7 GHz 3m distance / emission w/o ISO 7137, CISPR 25 and ISO 7637-2	SRPS EN 60601-1-2:2016 (EN 60601-1-2:2015)
20.	Residential, commercial and light-industrial environments	Emission testing	up to 2.7 GHz 3m distance in SAC	SRPS EN 61000-6-3:2008 +A1:2011+AC:2012 (EN 61000-6-3:2007 +A1:2011+AC:2012)
		Immunity testing		SRPS EN 61000-6-1:2008 (EN 61000-6-1:2007)

Test site: in laboratory				
Electromagnetic compatibility testing (EMC)				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
21.	Industrial environments	Emission testing	up to 2.7 GHz 3m distance y SAC	SRPS EN 61000-6-4:2008 +A1:2011 (EN 61000-6-4:2007 +A1:2011)
		Immunity testing		SRPS EN 61000-6-2:2008 (EN 61000-6-2:2005 + AC: 2005)
22.	Electrical and electronic equipment, devices and systems intended for connection to public low-voltage supply systems	Limits for harmonic current emissions	monophase	SRPS EN 61000-3-2:2014 (EN 61000-3-2:2014)
		Limitation of voltage changes, voltage fluctuations and flicker	monophase	SRPS EN 61000-3-3:2014 (EN 61000-3-3:2013)
23.	Electrical and electronic equipment, devices and systems <i>(EMC basic standards)</i>	Electrostatic Discharge (ESD) Immunity testing		SRPS EN 61000-4-2:2009 (EN 61000-4-2:2009)
		Radiated RF immunity testing		SRPS EN 61000-4-3:2008 +A1:2009 + A2:2012 (EN 61000-4-3:2006 +A1:2008+ A2:2010)
		Electrical fast transient/burst immunity testing		SRPS EN 61000-4-4:2013 (EN 61000-4-4:2012)
		Surge immunity testing	Monophase, without 10/700 µs pulses	SRPS EN 61000-4-5:2014 (EN 61000-4-5:2014)
		Conducted disturbances immunity testing		SRPS EN 61000-4-6: 2014 (EN 61000-4-6:2014)
		Power frequency magnetic field immunity testing		SRPS EN 61000-4-8:2012 (EN 61000-4-8:2010)
		Pulse magnetic immunity testing	w/o Helmholtz coils	SRPS EN 61000-4-9:2009 (EN 61000-4-9:1993 +A1:2001)
		Voltage dips, short interruptions and voltage variations immunity testing	monophase	SRPS EN 61000-4-11: 2008 (EN 61000-4-11:2004)
		Conducted RF emissions	9 kHz – 30 MHz by LISN or ISN	SRPS EN 55016-2-1: 2014 +A1:2017 (EN 55016-2-1:2014 +A1:2017)
Radiated RF emissions	up to 2.7 GHz 3m distance in SAC	SRPS EN 55016-2-3:2012 (EN 55016-2-3:2010)		
24.	Multimedia Equipment (MME): - IT equipment - AV equipment - TV, radio and satellite receivers - Lighting entertainment equipment And combination of the above.	Testing of conducted and radiated emissions	up to 2.7 GHz	SRPS EN 55032:2015 +AC:2016 (EN 55032:2015 + AC:2016-07)

Test site: in laboratory Electromagnetic compatibility testing (EMC)				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
25.	Electrical and Electronic Equipment	Powerline conducted emission measurements		ANSI C63.4 - 2014
		Radiated emission measurements	30 MHz - 2.7 GHz	ANSI C63.4 – 2014

Test site: in-situ Electromagnetic compatibility testing				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
26.	Machine tools (electrically powered) or machine parts (components)	Emission testing		SRPS EN 50370-1:2008 (EN 50370-1:2005)
		Immunity to electrostatic discharge	ESD only	SRPS EN 50370-2:2008 (EN 50370-2:2005)
27.	Industrial, science and medical equipment (ISM)	Emission testing	up to 2 GHz	SRPS EN 55011:2011 +A1:2011 (EN 55011:2009 + A1:2010)

Test site: in laboratory Electrical and electronic testing				
Ordinal	Test subject / material / product	Test type and/or characteristic to be measured (testing technique)	Range of measurements (where applicable)	Reference
28.	Electrical products and equipment, telecommunications, electronics Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques	RF output power		SRPS EN300 328 v1.8.1:2013 T. 5.3.2 (EN 300 328 v1.8.1:2012 c. 5.3.2)
				SRPS EN 300 328 V1.9.1:2015 T. 5.3.2 (EN 300 328 v1.9.1:2015 c. 5.3.2)
		Power Spectral Density		SRPS EN300 328 v1.8.1:2013 T.5.3.3 (EN 300 328 v1.8.1:2012 c.5.3.3)
				SRPS EN 300 328 V1.9.1:2015 T.5.3.3 (EN 300 328 v1.9.1:2015 c.5.3.3)

		Occupied Channel Bandwidth		SRPS EN300 328 v1.8.1:2013 т.5.3.8 (EN 300 328 v1.8.1:2012 c.5.3.8)
				SRPS EN 300 328 V1.9.1:2015 т.5.3.8 (EN 300 328 v1.9.1:2015 c.5.3.8)
29.	Short Range Devices (SRD) Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz	Permitted range of operating frequencies	Conducted method	SRPS EN 300330-1 V1.8.1:2015 т.7.3 (EN 300330-1 V1.8.1:2015 c.7.3)
30.	Short Range Devices (SRD) Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW	Average power	Conducted method in normal test conditions	SRPS EN 300220-1 V2.4.1:2013 т. 7.2 (EN 300220-1 V2.4.1:2012 c. 7.2)
		Transient power		SRPS EN 300220-1 V2.4.1:2013 т. 7.5 (EN 300220-1 V2.4.1:2012 c. 7.5)
		Modulation bandwidth	Conducted method in normal test conditions	SRPS EN 300220-1 V2.4.1:2013 т. 7.7 (EN 300220-1 V2.4.1:2012 c. 7.7)
		Transmitter unwanted emissions in the spurious domain	Conducted method	SRPS EN 300220-1 V2.4.1:2013 т. 7.8 (EN 300220-1 V2.4.1:2012 c. 7.8)
		Frequency stability under low voltage conditions		SRPS EN 300220-1 V2.4.1:2013 т. 7.9 (EN 300220-1 V2.4.1:2012 c. 7.9)
		Duty cycle		SRPS EN 300220-1 V2.4.1:2013 т. 7.10 (EN 300220-1 V2.4.1:2012 c. 7.10)
		Receiver spurious radiation	Conducted method	SRPS EN 300220-1 V2.4.1:2013 т. 8.6 (EN 300220-1 V2.4.1:2012 c. 8.6)