

1 EU declaration of conformity

This declaration attests the compliance of the instrument with the standard specifications for electrical instruments and accessories and with the standard specifications for safety and system validation of the manufacturing company.

The responsibility for issuing this EU declaration of conformity lies solely with the manufacturer.

1.1 Product validity

This declaration is valid for the following products or product versions:

- **923 Mira M-1**

Metrohm Instant Raman Analyzers (Mira) are handheld, high-power Raman spectrometers designed for the rapid, nondestructive identification of chemical and pharmaceutical samples, both liquid and solid. Barely larger than a smartphone, the Mira spectrometers are the only handheld Raman spectrometers currently on the market with Orbital Raster Scan (ORS) technology.

1.2 Directives

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:



- **2014/35/EU –Low Voltage Directive, LVD**

Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits; Official Journal of the EU L96, 29 March 2014, p. 357-374

- **2014/30/EU – EMC Directive, EMC**

Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility; Official Journal of the EU L96, 29 March 2014, p. 79-106



- **2011/65/EU – Directive for certain hazardous substances, RoHS**

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment; Official Journal of the EU L174, 1 July 2011, p. 88-110

- **2012/19/EU – Disposal and recycling of electrical and electronic equipment, WEEE**

Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE); Official Journal of the EU L197, 24 July 2012, p. 38-71

1.3 Safety specifications

This instrument fulfills the following safety requirements:

Design and type testing

- **EN 61010-1: 2010**
Safety requirements for electrical equipment for measurement, control, and laboratory use
- **EN 60529: 2013 – degree of protection IP40**
Degrees of protection provided by enclosures (IP Code)
- **EN 60825-1: 2014**
Safety of laser products – Part 1: Instrument classification and requirements
- **ISO 12100: 2010**
General principles for design - Risk assessment and risk reduction
- **EN 61140: 2016 – protection class III**
Protection against electric shock - Common aspects for installation and equipment

1.4 Electromagnetic compatibility (EMC)

Design and type testing

- **EN 61326-1: 2013**
Electrical equipment for measurement, control and laboratory use -
General EMC requirements

1.4.1 Emission

Standards fulfilled

- EN 61000-6-3: 2011
- EN 55011 / CISPR 11: 2016

1.4.2 Immunity

Standards fulfilled

- EN 61000-6-2: 2005
- EN 61000-4-2: 2009
- EN 61000-4-3: 2010
- EN 61000-4-4: 2012
- EN 61000-4-5: 2014

- EN 61000-4-6: 2014

1.5 Manufacturer

Metrohm AG, Ionenstrasse, CH-9100 Herisau/Switzerland

Metrohm AG holds the SQS certificate ISO 9001 – Quality management system for the development, production and sale of instruments and accessories for analyses.

Herisau, January 7th, 2019

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