

(PREVIEW)

Indian Standard

EXPRESSION OF PERFORMANCE OF ELECTROCHEMICAL ANALYZERS

1 SCOPE

1.1 This standard (Part 1) is applicable to electrochemical analyzers used for the determination of certain properties of (generally aqueous) solutions such as *pH* value, electrical conductivity, dissolved oxygen content, the concentration of specified ions and redox potential.

1.2 It includes the terminology, definitions, requirements for statements by manufacturers and tests that are common to all electrochemical analyzers. Other standards in this series describe those aspects that are specific to certain types, for example, IS 13673 (Part 2) : 1992 'Expression of performance of electrochemical analyzers : Part 2 *pH* value'.

1.3 It is applicable to analyzers specified for installation in any location and to such analyzers having either flow-through or immersible type sensors

1.4 It is applicable to the complete analyzer when supplied by one manufacturer as an integral unit comprised of all mechanical, electrical and electronic portions. It also applies to sensor units alone and electronic units alone when supplied separately or by different manufacturers.

For the purpose of this standard, any regulator for mains-supplied power or non-mains power supply, provided with the analyzer or specified by the manufacturer, is considered part of the analyzer whether it is integral or housed separately.

1.5 It does not apply to accessories such as recorders, analogue-to-digital converters or data acquisition systems, used in conjunction with the analyzers except that when two or more such analyzers are combined and sold as a sub-system and a single electronic unit is supplied to provide continuous measurement of several properties, that readout unit is considered to be part of the analyzer. Similarly, e.m.f. to-current or e.m.f.-to-pressure converters that are an integral part of the analyzer are included.

1.6 Safety requirements are covered in IS 9858 : 1981 'Safety requirements for electronic measuring apparatus'.

2 REFERENCES

2.1 The Indian Standards listed in Annex A are necessary adjuncts to this standard.

ANNEX A (Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>
6756 : 1972	Technical documentation to be supplied with electronic measuring equipment

9176 : 1979	Method for specifying the functional performance of the electronic measuring equipment
7722 : 1975	Analogue pneumatic signals for process control systems
9858 : 1981	Safety requirements for electronic measuring apparatus
7728 : 1984	<i>Analogue</i> document signals for process control systems (<i>first revision</i>)
13673 (Part 2) : 1993	Expression of performance of electrochemical analyzers: Part 2 pH Value