

ISO 22158:2011-05 (E)

Input/output protocols and electronic interfaces for water meters - Requirements

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Pulse output water meters -- type A	3
4.1	General	3
4.2	Pulse output modes	3
4.3	Pulse waveform definitions	3
4.4	Pulse data set types	3
4.5	Signal output types	8
4.6	Pulse configuration	8
5	Non-addressable water meters -- type B	8
5.1	General	8
5.2	Non-addressable output modes	8
5.3	Non-addressable data set types	9
5.4	Non-addressable V-frame data protocol	10
5.5	Non-addressable two-wire asynchronous mode for reading via an inductive pad and probe	12
5.6	Non-addressable three-wire asynchronous mode for direct connection to the transponder/bus node	13
5.7	Non-addressable two-wire synchronous mode for reading via an inductive pad and probe	14
5.8	Non-addressable three-wire synchronous mode intended for direct connection to the transponder/bus node	15
5.9	Non-addressable two-wire bidirectional asynchronous mode for reading via optocouplers and probe	15
5.10	Compatibility statement	17
6	Addressable water meters -- type C	17
6.1	General	17
6.2	Output mode 1, based on M-bus technology	17
6.3	Output mode 2, based on Dialog technology	29
6.4	Output mode 3, based on NABS technology	39
	Annex A (informative) Designation of registration authority	51
	Bibliography	52