

ISO/IEEE 11073-10404:2022-12 (E)

Health informatics - Device interoperability - Part 10404: Personal health device communication - Device specialization - Pulse oximeter

Contents	Page
1. Overview	12
1.1 Scope	12
1.2 Purpose	12
1.3 Context	12
2. Normative references.....	13
3. Definitions, acronyms, and abbreviations	13
3.1 Definitions	13
3.2 Acronyms and abbreviations	14
4. Introduction to ISO/IEEE 11073 personal health devices	14
4.1 General	14
4.2 Introduction to IEEE 11073-20601 modeling constructs.....	15
4.3 Compliance with other standards.....	15
5. Pulse oximeter device concepts and modalities.....	16
5.1 General	16
5.2 Device types	16
5.3 General concepts.....	16
5.4 Collected data	17
5.5 Derived data.....	19
5.6 Stored data.....	19
5.7 Device configurations	19
6. Pulse oximeter DIM	20
6.1 Overview	20
6.2 Class extensions.....	20
6.3 Object instance diagram	20
6.4 Types of configuration.....	21
6.5 MDS object.....	22
6.6 Numeric objects.....	26
6.7 Real-time sample array (RT-SA) objects.....	36
6.8 Enumeration objects	37
6.9 PM-store objects.....	41
6.10 Scanner objects.....	45
6.11 Class extension objects.....	48
6.12 Pulse oximeter information model extensibility rules	48
7. Pulse oximeter service model.....	48
7.1 General	48
7.2 Object access services.....	48
7.3 Object access EVENT REPORT services	52
8. Pulse oximeter communication model.....	52
8.1 Overview	52
8.2 Communications characteristics	52
8.3 Association procedure	53
8.4 Configuring procedure.....	55
8.5 Operating procedure	56
8.6 Time synchronization	57

9. Test associations	57
9.1 Behavior with standard configuration.....	57
9.2 Behavior with extended configurations	58
10. Conformance	58
10.1 Applicability	58
10.2 Conformance specification	58
10.3 Levels of conformance	58
10.4 Implementation conformance statements (ICSs)	59
Annex A (informative) Bibliography	63
Annex B (normative) Additional ASN.1 definitions	64
Annex C (normative) Allocation of identifiers.....	65
Annex D (informative) Message sequence examples.....	67
Annex E (informative) PDU examples.....	69
Annex F (informative) Revision history.....	81