

ISO/IEEE 11073-10404:2010-05 (E)

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

Contents	Page
Foreword.....	v
Introduction.....	vii
1. Overview.....	1
1.1 Scope.....	1
1.2 Purpose.....	1
1.3 Context.....	2
2. Normative references	2
3. Definitions, acronyms, and abbreviations	2
3.1 Definitions.....	2
3.2 Acronyms and abbreviations.....	3
4. Introduction to ISO/IEEE 11073 personal health devices.....	3
4.1 General.....	3
4.2 Introduction to IEEE 11073-20601 modeling constructs	4
5. Pulse oximeter device concepts and modalities	4
5.1 General.....	4
5.2 Device types.....	5
5.3 General concepts	5
5.4 Collected data.....	6
5.5 Derived data	8
5.6 Stored data	8
5.7 Device configurations	8
6. Pulse oximeter DIM.....	9
6.1 Overview.....	9
6.2 Class extensions	9
6.3 Object instance diagram.....	9
6.4 Types of configuration	10
6.5 MDS object.....	11
6.6 Numeric objects	14
6.7 Real-time sample array (RT-SA) objects.....	24
6.8 Enumeration objects.....	25
6.9 PM-store objects	29
6.10 Scanner objects	33
6.11 Class extension objects	37
6.12 Pulse oximeter information model extensibility rules.....	37

7. Pulse oximeter service model	37
7.1 General.....	37
7.2 Object access services	37
7.3 Object access EVENT REPORT services.....	40
8. Pulse oximeter communication model	41
8.1 Overview.....	41
8.2 Communications characteristics.....	41
8.3 Association procedure.....	42
8.4 Configuring procedure	43
8.5 Operating procedure.....	45
8.6 Time synchronization.....	46
9. Test associations	46
9.1 Behavior with standard configuration	46
9.2 Behavior with extended configurations.....	46
10. Conformance.....	46
10.1 Applicability.....	46
10.2 Conformance specification.....	47
10.3 Levels of conformance	47
10.4 Implementation conformance statements (ICSs)	48
Annex A (informative) Bibliography.....	52
Annex B (normative) Additional ASN.1 definitions	53
Annex C (normative) Allocation of identifiers	55
Annex D (informative) Message sequence examples	57
Annex E (informative) PDU examples	59