ISO/IEEE 11073-10424:2016-06 (E)

Health informatics - Personal health device communication - Part 10424: Device specialization - Sleep apnoea br eathing therapy equipment (SABTE)

Contents

Page

1. Overview 1
1.1 Scope 1
1.2 Purpose 2
1.1 Context 2

2. Normative references 2

3. Definitions, acronyms, and abbreviations 3
3.1 Definitions 3
3.2 Acronyms and abbreviations 4

4. Introduction to ISO/IEEE 11073 personal health devices standards 5
4.1 General 5
4.2 Introduction to ISO/IEEE 11073-20601 modeling constructs 5
4.3 Compliance with other standards 6

5. SABTE device concepts and modalities 7
5.1 General 7
5.2 Compliance monitoring 10
5.3 Efficacy monitoring 11
5.4 Service monitoring 13
5.5 Device settings 14
5.6 Therapy settings 14

6. Sleep apnoea breathing therapy equipment domain information model 18
6.1 Overview 18
6.2 Class extensions 18
6.3 Object instance diagram 19
6.4 Types of configuration 21
6.5 Profile 21
6.6 Medical device system object 23
6.7 Numeric objects 29
6.8 Real-time sample array objects 48
6.9 Enumeration objects 50
6.10 PM-store objects 60
6.11 Scanner objects 65
6.12 Class extension objects 68
6.13 SABTE information model extensibility rules 69

7. SABTE service model 69
7.1 General 69
7.2 Object access services 69
7.3 Object access event report services 72

8. SABTE communication model 73
8.1 Overview 73
8.2 Communications characteristics 73
8.3 Association procedure 73
8.4 Configuring procedure 75
8.5 Operating procedure 78
8.6 Time synchronization 79

9. Test associations 79
9.1 Behavior with standard configuration 79
9.2 Behavior with extended configurations 79

10. Conformance 80
10.1 Applicability 80
10.2 Conformance specification 80
10.3 Levels of conformance 80
10.4 Implementation conformance statements 81

Annex A (informative) Bibliography 86

Annex B (normative) Any additional ASN.1 definitions 87
B.1 Efficacy annotations bit mapping 87
B.2 Compliance annotations bit mapping 88
B.3 PHD DM status bit mapping 88
B.4 Autostart/-stop bit mapping 89

Annex C (normative) Allocation of identifiers 90
C.1 General 90
C.2 Definitions of terms and codes 90
C.3 Systematic derivations of terms and codes 93

Annex D (informative) Message sequence examples 101

Annex E (informative) Protocol data unit examples 103
E.1 General 103
E.2 Association information exchange 103
E.3 Configuration information exchange 106
E.4 GET MDS attributes service 109
E.5 Data reporting 110
E.6 Disassociation 111