DIN EN ISO 11073-00103:2017-05 (E)

Health informatics - Personal health device communication - Part 00103: Overview (ISO/IEEE 11073-00103:2015); English version EN ISO 11073-00103:2017

Contents

Page

1. Overview 1
1.1 Scope 1
1.2 Purpose 1
1.3 The standards within 11073 standards applicable for the personal health devices (PHD) domain 2
1.4 Audience 3
1.5 Document organization 3

2. Definitions, acronyms, and abbreviations 3
2.1 Definitions 3
2.2 Acronyms and abbreviations 4

3. PHD environment overview 5
3.1 General 5
3.2 Topology of PHD systems 6
3.3 Use contexts 7
3.4 Health and fitness 9
3.5 Independent living (aging independently) 11
3.6 Disease management 13
3.7 Device examples 20

4. Introduction into IEEE 11073 PHD standards (tutorial) 23
4.1 General description of the IEEE 11073 context 23
4.2 Domain information model 27
4.3 Nomenclature 29
4.4 Service model 30
4.5 Communication model 33

5. Utilizing IEEE 11073 PHD standards in the development process 35
5.1 Example implementation: Introduction, how to use ISO/IEEE 11073-20601:2010(E) [B48] 35
5.2 Customer needs analysis, use knowledge from the IEEE 11073 PHD standards 36
5.3 Risk management 37
5.4 Security 39
5.5 Quality of service (QoS) 43
5.6 Regulatory issues—what is a medical device? 43
5.7 System development planning: Using available IEEE 11073 PHD conformant components may speed things up 47
5.8 System requirements analysis: Drawing from the ISO/IEEE 11073-20601 blueprints 48
5.9 Software architectural design: Using the ISO/IEEE 11073-20601 building blocks 49
5.10 Software detailed design: Using the ISO/IEEE 11073-20601 engineering elements 50
5.11 Software unit implementation and verification 50
5.12 System integration and testing, validation 50
5.13 System release 50
5.14 Configuration management 51
5.15 Maintenance 51

6. Conformance and interoperability 51

Annex A (informative) Example use case regular blood pressure control, detailed description 53

Annex B (informative) Example transaction profiles 55

Annex C (informative) Transport layer details 60

Annex D (informative) Bibliography 63