

**Service diagnostic interface for consumer electronics  
products and networks - Implementation for ECHONET**

## EESTI STANDARDI EESSÕNA

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**Service diagnostic interface for consumer  
electronics products and networks -  
Implementation for echonet  
(IEC 62394:2013)**

Interface de diagnostic de service pour  
produits et réseaux électroniques grand  
public - Implémentation pour echonet  
(CEI 62394:2013)

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für Echonet (IEC 62394:2013)

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## Foreword

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## CONTENTS

|                                                                  |     |
|------------------------------------------------------------------|-----|
| FOREWORD.....                                                    | 7   |
| INTRODUCTION.....                                                | 9   |
| 1 Scope.....                                                     | 10  |
| 2 Normative references .....                                     | 10  |
| 3 Terms, definitions and abbreviations .....                     | 10  |
| 3.1 Terms and definitions .....                                  | 10  |
| 3.2 Abbreviations .....                                          | 11  |
| 4 Different types of service diagnostics .....                   | 12  |
| 4.1 Stand-alone products .....                                   | 12  |
| 4.2 Facilities or household appliances network.....              | 12  |
| 4.3 Remote diagnosis.....                                        | 12  |
| 5 SDI requirements .....                                         | 12  |
| 5.1 General.....                                                 | 12  |
| 5.2 Hardware .....                                               | 12  |
| 5.3 Software.....                                                | 13  |
| 6 Tester software requirements .....                             | 14  |
| 6.1 Reading the property diagnostic unit .....                   | 14  |
| 6.2 General information (product identification) .....           | 14  |
| 6.3 Diagnosis information.....                                   | 14  |
| 7 Control protocol 1 <sup>st</sup> .....                         | 14  |
| 7.1 General.....                                                 | 14  |
| 7.2 Frame format.....                                            | 14  |
| 8 Control protocol 2 <sup>nd</sup> .....                         | 42  |
| 8.1 General.....                                                 | 42  |
| 8.2 Frame format.....                                            | 42  |
| 9 ECHONET objects: detailed specifications .....                 | 55  |
| 9.1 Basic concept.....                                           | 55  |
| 9.2 ECHONET properties: basic specifications .....               | 56  |
| 9.3 Device object super class specifications .....               | 58  |
| 9.4 Temperature sensor class specifications .....                | 70  |
| 9.5 Humidity sensor class specifications .....                   | 70  |
| 9.6 Illuminance sensor class specifications .....                | 71  |
| 9.7 Human detection sensor class specifications .....            | 72  |
| 9.8 Electric energy sensor class specifications .....            | 73  |
| 9.9 Open/close sensor class specifications .....                 | 74  |
| 9.10 Current value sensor class specifications .....             | 76  |
| 9.11 Air speed sensor class specifications .....                 | 77  |
| 9.12 Water flow rate sensor class specifications .....           | 78  |
| 9.13 Home air conditioner class specifications .....             | 79  |
| 9.14 Ventilation fan class specifications .....                  | 99  |
| 9.15 Air purifier class specifications .....                     | 100 |
| 9.16 Humidifier class specifications.....                        | 101 |
| 9.17 Electrically operated shade class specifications .....      | 104 |
| 9.18 Electric water heater class specifications .....            | 105 |
| 9.19 Household solar power generation class specifications ..... | 111 |

|                                                                                                                        |     |
|------------------------------------------------------------------------------------------------------------------------|-----|
| 9.20 Floor heater class specifications.....                                                                            | 113 |
| 9.21 Fuel cell class specifications .....                                                                              | 118 |
| 9.22 Storage battery class specifications.....                                                                         | 125 |
| 9.23 Electric vehicle charge-discharge system class specifications .....                                               | 133 |
| 9.24 Water flow meter class specifications .....                                                                       | 142 |
| 9.25 Power distribution board metering class specifications .....                                                      | 146 |
| 9.26 Smart electric meter class specifications .....                                                                   | 166 |
| 9.27 Smart gas meter class specifications.....                                                                         | 177 |
| 9.28 General light class specifications.....                                                                           | 184 |
| 9.29 Refrigerator class specifications .....                                                                           | 187 |
| 9.30 Microwave oven class specifications .....                                                                         | 197 |
| 9.31 Washer and dryer class specifications.....                                                                        | 213 |
| 9.32 Clothes dryer class specifications.....                                                                           | 235 |
| 9.33 Cooking heater class specifications.....                                                                          | 237 |
| 9.34 Switch class specifications .....                                                                                 | 243 |
| 10 Property map description format.....                                                                                | 244 |
| Bibliography.....                                                                                                      | 245 |
| Figure 1 – ECHONET frame for plain data format .....                                                                   | 15  |
| Figure 2 – EHD detailed specifications.....                                                                            | 16  |
| Figure 3 – Configuration of SEA and DEA when an individual address is specified .....                                  | 17  |
| Figure 4 – DEA (broadcast-stipulated) address configuration .....                                                      | 17  |
| Figure 5 – Broadcast target stipulation code .....                                                                     | 18  |
| Figure 6 – Node group stipulation bit specifications .....                                                             | 18  |
| Figure 7 – OHD detailed specifications .....                                                                           | 19  |
| Figure 8 – EOJ detailed specifications .....                                                                           | 19  |
| Figure 9 – EPC detailed specifications.....                                                                            | 21  |
| Figure 10 – ESV detailed specifications .....                                                                          | 21  |
| Figure 11 – EDATA configuration in property value write service .....                                                  | 25  |
| Figure 12 – EDATA configuration in property value read service .....                                                   | 25  |
| Figure 13 – EDATA configuration in property value notification service .....                                           | 26  |
| Figure 14 – EDATA configuration in property value element-stipulated write service .....                               | 27  |
| Figure 15 – EDATA configuration in property value element-stipulated read service .....                                | 28  |
| Figure 16 – EDATA configuration in property value element-stipulated notification service.....                         | 29  |
| Figure 17 – EDATA configuration in property value element-stipulated addition .....                                    | 30  |
| Figure 18 – EDATA configuration in property value element-stipulated deletion .....                                    | 31  |
| Figure 19 – EDATA configuration in property value element-stipulated existence confirmation.....                       | 32  |
| Figure 20 – EDATA configuration in property value element addition .....                                               | 33  |
| Figure 21 – EDATA configuration in property value notification (response required).....                                | 33  |
| Figure 22 – EDATA configuration in property value element-stipulated notification (response required) .....            | 34  |
| Figure 23 – CpESV configuration .....                                                                                  | 35  |
| Figure 24 – Relationship between write request (requiring no response) and write "process-not-possible" response ..... | 38  |

|                                                                                                                                                  |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Figure 25 – Relationship between write request (requiring a response), write "accepted" response, and write "process-not-possible" response..... | 39  |
| Figure 26 – Relationship between read request (requiring a response), read "accepted" response, and read "process-not-possible" response .....   | 40  |
| Figure 27 – Notification message format .....                                                                                                    | 41  |
| Figure 28 – Relationship between property value notification (requiring a response) and property value notification response.....                | 41  |
| Figure 29 – Processing target property counter for three requests .....                                                                          | 42  |
| Figure 30 – Property data counter.....                                                                                                           | 42  |
| Figure 31 – ECHONET Lite frame format .....                                                                                                      | 43  |
| Figure 32 – Detailed specifications of ELHD1 .....                                                                                               | 43  |
| Figure 33 – Detailed specifications of ELHD2 .....                                                                                               | 44  |
| Figure 34 – Detailed specifications of EOJ code .....                                                                                            | 44  |
| Figure 35 – ELSV code detailed specifications.....                                                                                               | 45  |
| Figure 36 – ELDATA configuration for property value write service (no response required).....                                                    | 48  |
| Figure 37 – ELDATA configuration for property value write service (response required).....                                                       | 49  |
| Figure 38 – ELDATA configuration for property value read service.....                                                                            | 50  |
| Figure 39 – ELDATA configuration for property value write and read service .....                                                                 | 51  |
| Figure 40 – ELDATA configuration for property value notification service.....                                                                    | 52  |
| Figure 41 – ELDATA configuration for property value notification (response required) service.....                                                | 53  |
| Figure 42 – EPC detailed specifications .....                                                                                                    | 54  |
| Figure 43 – ECHONET Lite Property data counter .....                                                                                             | 55  |
| Figure 44 – Example of array elements .....                                                                                                      | 57  |
| Figure 45 – Example of property value element deletion .....                                                                                     | 58  |
| Figure 46 – Example of property value element addition .....                                                                                     | 58  |
| Figure 47 – Data structure of "identification number" property.....                                                                              | 64  |
| Figure 48 – Data structure of "manufacturer's fault code" property .....                                                                         | 65  |
| Figure 49 – Air flow direction (vertical) setting .....                                                                                          | 90  |
| Figure 50 – Air flow direction (horizontal) setting .....                                                                                        | 91  |
| Figure 51 – Mounted air cleaning method .....                                                                                                    | 93  |
| Figure 52 – Air purifier function setting .....                                                                                                  | 94  |
| Figure 53 – Air refresh method.....                                                                                                              | 94  |
| Figure 54 – Air refresher function setting .....                                                                                                 | 95  |
| Figure 55 – Self-cleaning method.....                                                                                                            | 95  |
| Figure 56 – Self-cleaning function setting .....                                                                                                 | 96  |
| Figure 57 – Implemented ion emission method .....                                                                                                | 104 |
| Figure 58 – Daily timer setting .....                                                                                                            | 117 |
| Figure 59 – Stove .....                                                                                                                          | 240 |
| Table 1 – Bit pattern for hop count.....                                                                                                         | 16  |
| Table 2 – List of class group codes.....                                                                                                         | 20  |
| Table 3 – List of ESV codes for requests .....                                                                                                   | 23  |
| Table 4 – List of ESV codes for response/notification.....                                                                                       | 23  |

|                                                                                          |     |
|------------------------------------------------------------------------------------------|-----|
| Table 5 – List of ESV codes for “response-not-possible” responses .....                  | 24  |
| Table 6 – List of CpESV codes for request/notification .....                             | 36  |
| Table 7 – List of CpESV codes for “accepted” response .....                              | 37  |
| Table 8 – List of CpESV codes for “process-not-possible” response .....                  | 37  |
| Table 9 – List of class group codes .....                                                | 45  |
| Table 10 – List of service codes for request .....                                       | 47  |
| Table 11 – List of ELSV codes for response/notification .....                            | 47  |
| Table 12 – List of ELSV codes for “response not possible” .....                          | 48  |
| Table 13 – EPC code allocation table .....                                               | 54  |
| Table 14 – Data types, data sizes, and overflow/underflow codes .....                    | 57  |
| Table 15 – List of device object super class configuration properties .....              | 59  |
| Table 16 – Installation location (space) types and the bit values assigned to them ..... | 63  |
| Table 17 – Fault-content property value assignments .....                                | 67  |
| Table 18 – List of temperature sensor properties .....                                   | 70  |
| Table 19 – List of humidity sensor properties .....                                      | 71  |
| Table 20 – List of illuminance sensor properties .....                                   | 71  |
| Table 21 – List of human detection sensor properties .....                               | 72  |
| Table 22 – List of electric energy sensor properties .....                               | 73  |
| Table 23 – List of open/close sensor properties .....                                    | 75  |
| Table 24 – List of current value sensor properties .....                                 | 76  |
| Table 25 – List of air speed sensor properties .....                                     | 77  |
| Table 26 – List of water flow rate sensor properties .....                               | 78  |
| Table 27 – List of home air conditioner properties .....                                 | 79  |
| Table 28 – Air flow direction (horizontal) setting .....                                 | 91  |
| Table 29 – List of ventilation fan properties .....                                      | 99  |
| Table 30 – List of air purifier properties .....                                         | 100 |
| Table 31 – List of humidifier properties .....                                           | 102 |
| Table 32 – List of electrically operated shade properties .....                          | 105 |
| Table 33 – List of electric water heater properties .....                                | 106 |
| Table 34 – List of household solar power generation properties .....                     | 111 |
| Table 35 – List of floor heater properties .....                                         | 114 |
| Table 36 – List of fuel cell properties .....                                            | 119 |
| Table 37 – List of storage battery properties .....                                      | 126 |
| Table 38 – List of electric vehicle charge-discharge system properties .....             | 133 |
| Table 39 – List of water flow meter properties .....                                     | 142 |
| Table 40 – List of power distribution board metering properties .....                    | 146 |
| Table 41 – List of smart electric meter properties .....                                 | 167 |
| Table 42 – List of smart gas meter properties .....                                      | 177 |
| Table 43 – Security data information property .....                                      | 182 |
| Table 44 – gas consumption log information property .....                                | 184 |
| Table 45 – List of general light properties .....                                        | 184 |
| Table 46 – List of refrigerator properties .....                                         | 187 |
| Table 47 – List of microwave oven properties .....                                       | 198 |

|                                                                  |     |
|------------------------------------------------------------------|-----|
| Table 48 – Heating status property .....                         | 204 |
| Table 49 – Automatic heating setting property .....              | 205 |
| Table 50 – Automatic heating cycle codes .....                   | 206 |
| Table 51 – Prompt message codes .....                            | 210 |
| Table 52 – 2 bytes bitmap definition for each accessory .....    | 211 |
| Table 53 – List of washer and dryer properties.....              | 213 |
| Table 54 – washer and dryer setting property .....               | 219 |
| Table 55 – washer and dryer cycle option list 1 property .....   | 225 |
| Table 56 – Washer and dryer cycle option list 2 property .....   | 225 |
| Table 57 – Washer and dryer cycle option list 3 property .....   | 226 |
| Table 58 – Current stage of washer and dryer cycle property..... | 229 |
| Table 59 – List of clothes dryer properties .....                | 236 |
| Table 60 – List of cooking heater properties.....                | 238 |
| Table 61 – List of switch properties.....                        | 243 |
| Table 62 – Property map description format.....                  | 244 |

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## INTRODUCTION

Consumer products are often repaired by service workshops, which service a wide range of products developed by different manufacturers.

For highly complex products, fault diagnosis becomes increasingly difficult and time consuming.

To facilitate diagnosis, manufacturers often develop built-in diagnostic software that communicates with an external diagnostic unit through a service diagnostic interface (SDI).

To avoid the need for a service workshop to purchase several different diagnostic units from different manufacturers for different products, a standardized SDI is proposed for use by all manufacturers of any products requiring a diagnostic interface. The result will be that only one SDI is needed in the service workshops.

The SDI should be suitable for diagnosis in a facilities or household appliances network in which different products from different manufacturers are connected together. The interface should also allow for future development.

The standard SDI should

- be usable in future products,
- be easily connectable to a product or a network,
- be inexpensive,
- not limit product design.

# SERVICE DIAGNOSTIC INTERFACE FOR CONSUMER ELECTRONICS PRODUCTS AND NETWORKS – IMPLEMENTATION FOR ECHONET

## 1 Scope

This International Standard specifies requirements for service diagnostic software to be implemented in products that incorporate a digital interface. It does not specify requirements for carrying out remote diagnosis or for manufacturer-dependent software.

The SDI (Service Diagnostic Interface) requires an external controller (exclusive or general-purpose/PC) into which service diagnostic software can be loaded. Part of the controller software should be standardized while another part of this controller software should be unique to the manufacturer.

To reach a common approach in servicing all products from all manufacturers, it is necessary to standardize specific items to be tested in products and in controllers' diagnostic software.

The SDI is based upon the ECHONET specification version 2.11, ECHONET Lite specification version 1.01 and APPENDIX Detailed Requirements for ECHONET Device objects Release B because this interface will be used in future products. The use of this connection and existing communication protocols enable implementation in products at low cost, with maximum flexibility and efficiency.

The SDI consists of

- specific hardware and software requirements of the device under test (DUT);
- specific requirements of the controller:
  - the service software;
  - an ECHONET interface;
- the connection between the controller and the DUT.

This standard provides the minimal requirements necessary to carry out computerized diagnosis. It covers the standardized software of the controller as well as the standardized software and provisions in the DUT.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

(void)

## 3 Terms, definitions and abbreviations

### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.