

INTERNATIONAL STANDARD



Wireless power transfer – Airfuel alliance resonant baseline system specification (BSS)





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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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**Wireless power transfer – Airfuel alliance resonant baseline system specification
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CONTENTS

FOREWORD.....	7
INTRODUCTION.....	9
1 Scope.....	10
2 Normative references	10
3 Terms, definitions, symbols and abbreviated terms.....	10
3.1 Terms and definitions.....	10
3.2 Symbols and abbreviated terms	13
3.2.1 Symbols	13
3.2.2 Abbreviated terms	17
4 System description	17
5 Conformance and backwards compatibility	18
6 Device types.....	19
6.1 PTU classification	19
6.2 PRU category	20
7 Power transfer specifications	20
7.1 System equivalent circuit and reference parameters	20
7.2 General system requirements	21
7.2.1 Operating frequency	21
7.2.2 Z_{TX_IN} relationship to R_{RECT}	21
7.2.3 Power stability	21
7.2.4 PTU co-location protection.....	21
7.2.5 PRU self-protection (informative).....	21
7.3 Resonator requirements.....	21
7.3.1 Resonator coupling efficiency (RCE)	21
7.3.2 PTU resonator requirements.....	22
7.3.3 PRU resonator requirements	24
7.4 Load parameters.....	25
7.4.1 Load parameters introduction	25
7.4.2 Minimum load resistance	26
7.4.3 Maximum allowable dynamic load.....	26
7.4.4 Maximum load capacitance.....	26
8 Power control specifications	26
8.1 Control objectives	26
8.2 PTU specifications	26
8.2.1 PTU state	26
8.2.2 General state requirements	27
8.2.3 PTU power save state.....	28
8.2.4 PTU Low Power state	30
8.2.5 PTU Power Transfer state	31
8.2.6 PTU Configuration state	33
8.2.7 PTU Local Fault state	34
8.2.8 PTU latching fault state	34
8.2.9 PTU state transitions	35
8.2.10 PTU Test Mode.....	38
8.3 PRU specifications.....	38
8.3.1 PRU general requirements.....	38

8.3.2	PRU state model	41
8.3.3	Null state	42
8.3.4	PRU boot.....	42
8.3.5	PRU On state	42
8.3.6	PRU System Error state.....	43
8.3.7	PRU state transitions	44
9	Signaling specifications	45
9.1	Architecture and state diagrams.....	45
9.1.1	Architecture	45
9.1.2	Overall charge process	46
9.2	Charge procedure and requirements	48
9.2.1	Removing PRU from WPT network	48
9.2.2	Power Sharing mode	48
9.3	Bluetooth low energy requirements	49
9.3.1	Bluetooth low energy requirements introduction	49
9.3.2	Bluetooth low energy objectives.....	49
9.3.3	PTU hardware requirement.....	49
9.3.4	PRU hardware requirement.....	49
9.3.5	Basic network structure	49
9.3.6	RF requirements.....	49
9.3.7	Timing and sequencing requirements.....	50
9.3.8	Profile structure	53
9.4	BLE profile definition.....	53
9.4.1	GATT sub-procedure	53
9.4.2	Configuration	53
9.4.3	PRU requirements	54
9.4.4	PTU requirements.....	55
9.4.5	Connection establishment.....	55
9.4.6	Security considerations.....	57
9.4.7	Charge completion.....	57
9.5	WPT service characteristics	58
9.5.1	WPT service characteristics introduction.....	58
9.5.2	PRU advertising payload	58
9.5.3	WPT service	60
9.5.4	PRU control.....	62
9.5.5	PTU static parameter	64
9.5.6	PRU static parameter characteristic.....	69
9.5.7	PRU dynamic parameter characteristic	72
9.5.8	PRU alert characteristic.....	76
9.6	Cross connection algorithm.....	78
9.6.1	Cross connection algorithm introduction	78
9.6.2	Definitions	78
9.6.3	Acceptance of advertisement.....	78
9.6.4	Impedance shift sensing	78
9.6.5	Reboot bit handling.....	79
9.6.6	Time set handling	79
9.7	Mode transition	80
9.7.1	Mode transition introduction.....	80
9.7.2	Mode transition procedure	80

9.7.3	BLE reconnection procedure.....	81
10	PTU resonators	83
10.1	PTU resonators introduction.....	83
10.2	Class <i>n</i> design template	83
10.2.1	Class <i>n</i> design template introduction.....	83
10.2.2	Table of specifications	83
10.2.3	PTU resonator structure	83
10.3	Approved PTU resonators	83
Annex A (informative)	Reference PRU for PTU acceptance testing	84
A.1	Category 1	84
A.2	Category 2	84
A.3	Category 3	84
A.3.1	PRU design 3-1	84
A.3.2	Geometry.....	84
A.4	Category 4	87
A.5	Category 5	87
Annex B (informative)	Lost power	88
B.1	Overview.....	88
B.2	General.....	88
B.3	Cross connection issues	88
B.4	Handoff issues	88
B.5	Power noise issues	89
B.6	PTU lost power calculation.....	89
B.6.1	Lost power detection threshold	89
B.6.2	Lost power detection speed	89
B.6.3	PTU lost power calculation	89
B.6.4	PTU power transmission detection accuracy.....	89
B.6.5	PRU lost power reports.....	89
B.6.6	Accuracy of reported power	90
B.6.7	Other PRU lost power reports	90
Annex C (normative)	User experience requirements	91
C.1	General.....	91
C.2	User indication.....	91
C.2.1	PRU user indication	91
C.2.2	PTU user indication	91
Annex D (informative)	RCE calculations.....	92
D.1	RCE calculation (using S-parameters)	92
D.2	RCE calculation (using Z-parameters).....	93
D.2.1	Series tuned case.....	94
D.2.2	Other RCE calculations.....	94
D.3	Conversion between S-parameters and Z-parameters	94
Figure 1	– Wireless power transfer system.....	18
Figure 2	– PTU-PRU resonator P_{TX_IN}	19
Figure 3	– PTU-PRU resonator P_{RX_OUT}	20
Figure 4	– Equivalent circuit and system parameters	20
Figure 5	– PTU resonator-load considerations	24

Figure 6 – PTU state model	27
Figure 7 – Beacon sequences	29
Figure 8 – Load variation detection	29
Figure 9 – Discovery	30
Figure 10 – PTU I_{TX} transition responses.....	31
Figure 11 – PRU state model	41
Figure 12 – V_{RECT} operating regions	42
Figure 13 – Basic architecture of WPT system	45
Figure 14 – Basic state procedure (informative)	47
Figure 15 – Registration period timeline example (informative)	52
Figure 16 – PTU/PRU services/characteristics communication.....	54
Figure 17 – PRU mode transition – Device Address field set to a non-zero value.....	81
Figure 18 – PRU mode transition – Device Address field set to all zeros.....	82
Figure A.1 – PRU design 3 block diagram	84
Figure A.2 – Front view.....	85
Figure A.3 – Back view	85
Figure A.4 – Side view	86
Figure A.5 – Front view, coil only.....	86
Figure A.6 – Side view, coil only	86
Table 1 – PTU classification.....	19
Table 2 – PRU category.....	20
Table 3 – Minimum RCE (percent and dB) between PRU and PTU.....	22
Table 4 – Maximum load capacitance	26
Table 5 – Time requirement to enter PTU Power Transfer state	28
Table 6 – Sub-state of PTU Power Transfer	32
Table 7 – PTU latching faults	37
Table 8 – Example of accuracy of reported current	41
Table 9 – PRU system errors	45
Table 10 – RF budget (informative).....	50
Table 11 – Timing constraints	52
Table 12 – BLE profile characteristics	53
Table 13 – GATT sub-procedure	53
Table 14 – PRU advertising payload	58
Table 15 – Impedance shift bit	60
Table 16 – WPT service UUID	60
Table 17 – WPT service.....	61
Table 18 – GAP service	62
Table 19 – GATT service	62
Table 20 – PRU Control Characteristic.....	63
Table 21 – Detail: bit field for enables	63
Table 22 – Detail: bit field for permission	64
Table 23 – Detail: bit field for time set.....	64

Table 24 – PTU reporting static values to PRU	65
Table 25 – Detail: bit field for optional fields validity.....	65
Table 26 – PTU power	66
Table 27 – Max source impedance.....	67
Table 28 – Max load resistance	68
Table 29 – AirFuel protocol revision field	69
Table 30 – PTU number of devices	69
Table 31 – PRU reporting static values to the PTU	70
Table 32 – Detail: bit field for optional fields validity.....	70
Table 33 – Detail: bit field for PRU information	71
Table 34 – PRU dynamic parameter characteristic.....	73
Table 35 – Detail: bit field for optional fields validity.....	73
Table 36 – Detail: bit field for PRU alert.....	75
Table 37 – Detail: bit field for PRU alert.....	76
Table 38 – Test mode commands	76
Table 39 – PRU alert fields	77
Table 40 – Detail: bit field for PRU alert notification	77
Table 41 – Mode transition.....	78
Table A.1 – PRU table of specifications	84

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**WIRELESS POWER TRANSFER – AIRFUEL ALLIANCE RESONANT
BASELINE SYSTEM SPECIFICATION (BSS)**

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
100/2901/FDIS	100/2941/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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INTRODUCTION

In today's world, mainstream consumer mobile devices are ubiquitously supported by wireless technologies for data communication and connectivity functions while charging function is primarily supported by wired technologies. The development of wireless power transfer technologies offers increased user convenience for charging mobile devices; technologies include inductive, resonant, uncoupled (RF, ultrasonic, laser) methods.

IEC 63028 defines a specific wireless charging approach based on resonant technology and specifies technical requirements for the AirFuel™¹ resonant wireless power transfer (WPT) systems.

¹ AirFuel™ is the trade name of a product supplied by AirFuel Alliance. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named.

WIRELESS POWER TRANSFER – AIRFUEL ALLIANCE RESONANT BASELINE SYSTEM SPECIFICATION (BSS)

1 Scope

This document defines technical requirements, behaviors and interfaces used for ensuring interoperability for flexibly coupled wireless power transfer (WPT) systems for AirFuel Resonant WPT. This document is based on AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.3.

Products implementing this document are expected to follow applicable regulations and global standards.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.3 [viewed 2017-03-13]. Available at: <http://www.airfuel.org/technologies/specification-download>

AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.2.1 [viewed 2017-03-13]. Available at: <http://www.airfuel.org/technologies/specification-download>

Bluetooth core specification v4.0, or later versions as they are available [viewed 2017-03-13]. Available at: https://www.bluetooth.org/docman/handlers/downloaddoc.ashx?doc_id=229737

CSA4, or later versions as they are available [viewed 2017-03-13]. Available at: https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc_id=269452

3 Terms, definitions, symbols and abbreviated terms

3.1 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1.1

advertisement

connectable, undirected advertising event where the device transmits three WPT service specific ADV_IND packets and accepts both scan requests and connect requests

Note 1 to entry: There is one ADV_IND packet transmitted on each of the advertising channels.

Note 2 to entry: Receipt of an advertisement is defined to be receipt of one of the three advertisement packets.