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Irish Standard  
I.S. EN IEC 62282-6-400:2019

# Fuel cell technologies - Part 6-400: Micro fuel cell power systems - Power and data interchangeability

**I.S. EN IEC 62282-6-400:2019**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
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## National Foreword

I.S. EN IEC 62282-6-400:2019 is the adopted Irish version of the European Document EN IEC 62282-6-400:2019, Fuel cell technologies - Part 6-400: Micro fuel cell power systems - Power and data interchangeability

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**EN IEC 62282-6-400**

NORME EUROPÉENNE

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July 2019

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English Version

**Fuel cell technologies - Part 6-400: Micro fuel cell power systems - Power and data interchangeability (IEC 62282-6-400:2019)**

Technologies des piles à combustible - Partie 6-400:  
Systèmes à micropiles à combustible - Interchangeabilité  
de la puissance et des données  
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## **EN IEC 62282-6-400:2019 (E)**

### **European foreword**

The text of document 105/721/FDIS, future edition 1 of IEC 62282-6-400, prepared by IEC/TC 105 "Fuel cell technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62282-6-400:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-03-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-26

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|                    |      |  |
|--------------------|------|--|
| IEC 62684          | NOTE | Harmonized as EN IEC 62684                     |
| IEC 62282-6-100    | NOTE | Harmonized as EN 62282-6-100                   |
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| IEC 62680-2-2:2015 | NOTE | Harmonized as EN 62680-2-2:2015 (not modified) |

## Annex ZA (normative)

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| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                    | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|--------------|-------------|
| IEC/TS 62282-1     | -           | Fuel cell technologies - Part 1:<br>Terminology | -            | -           |

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**IEC 62282-6-400**

Edition 1.0 2019-05

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**



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**Fuel cell technologies –  
Part 6-400: Micro fuel cell power systems – Power and data interchangeability**

**Technologies des piles à combustible –  
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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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**IEC 62282-6-400**

Edition 1.0 2019-05

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**



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**Fuel cell technologies –  
Part 6-400: Micro fuel cell power systems – Power and data interchangeability**

**Technologies des piles à combustible –  
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## FUEL CELL TECHNOLOGIES –

Part 6-400: Micro fuel cell power systems –  
Power and data interchangeability

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|              |                  |
|--------------|------------------|
| FDIS         | Report on voting |
| 105/721/FDIS | 105/724/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.

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## FUEL CELL TECHNOLOGIES –

### Part 6-400: Micro fuel cell power systems – Power and data interchangeability

#### 1 Scope

This part of IEC 62282 covers the interchangeability of power and data between micro fuel cell power systems and electronic devices to provide the micro fuel cell power system compatibility for a variety of electronic devices while maintaining the safety and performance of the micro fuel cell system. For that purpose, this document covers power interfaces and their connector configuration. The power management circuitry and power sharing methodology are also provided.

This document also covers the data communication protocol and its data specification. Operation modes and alert conditions are also provided for the means to comply with the power control requirements of the electronic device.

A micro fuel cell power system and micro fuel cell power unit block diagram is shown in Figure 1. Micro fuel cell power systems and micro fuel cell power units are defined as devices that are wearable or easily carried by hand, providing DC outputs that do not exceed 60 V DC and power outputs that do not exceed 240 VA. This document covers the power and data interfaces between the micro fuel cell power unit and electronic device.

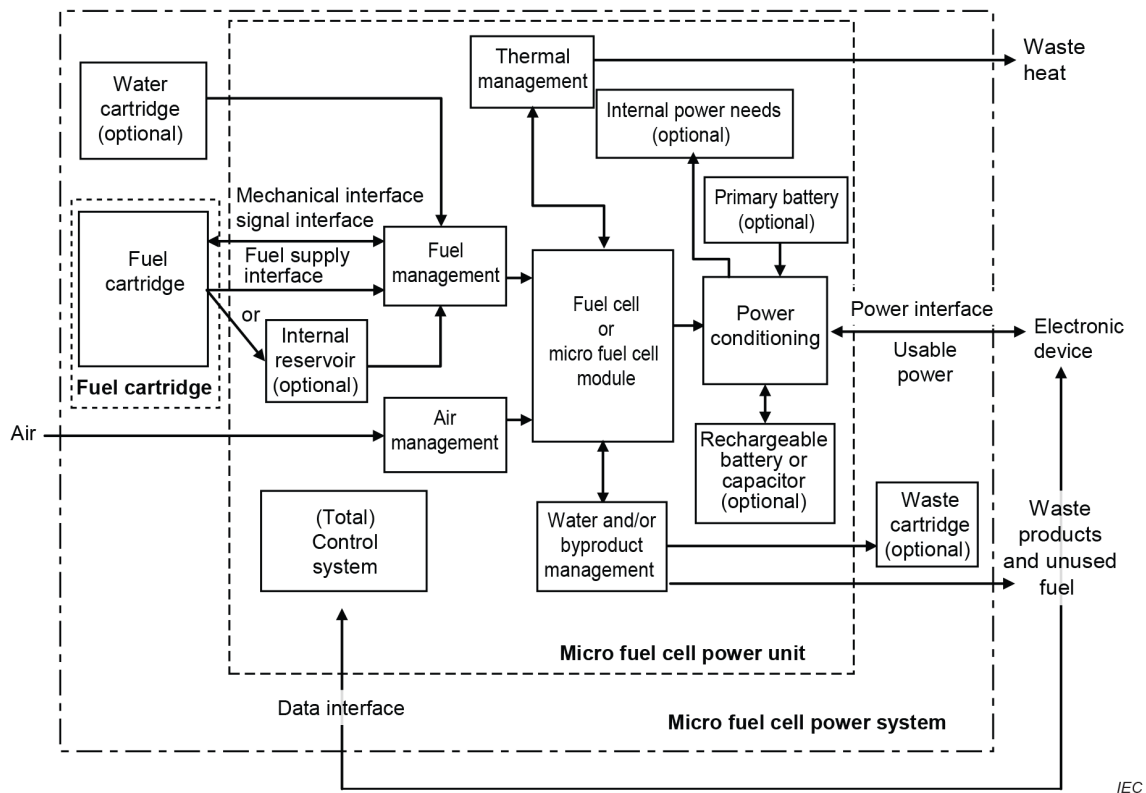


Figure 1 – Micro fuel cell power system and micro fuel cell power unit block diagram

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