

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

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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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## EUROPEAN STANDARD

## EN IEC 62282-6-400

## NORME EUROPÉENNE

## EUROPÄISCHE NORM

July 2019

ICS 27.070

**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 (IEC 62282-6-400:2019) Brennstoffzellentechnologien - Teil 6-400: Mikro-Brennstoffzellen-Energiesysteme - Austauschbarkeit von Leistung und Daten (IEC 62282-6-400:2019)

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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.

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•	latest date by which the document has to be implemented at national	(dop)	2020-03-26
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IEC 62684	NOTE	Harmonized as EN IEC 62684
IEC 62282-6-100	NOTE	Harmonized as EN 62282-6-100
IEC 62282-6-200	NOTE	Harmonized as EN 62282-6-200
IEC 62680-2-2:2015	NOTE	Harmonized as EN 62680-2-2:2015 (not modified)

## Annex ZA

(normative)

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Publication	Year	<u>Title</u>						<u>EN/HD</u>	Year
IEC/TS 62282-1	-		cell nology	technologies	-	Part	1:	-	-

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## IEC 62282-6-400

Edition 1.0 2019-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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

Technologies des piles à combustible – Partie 6-400: Systèmes à micropiles à combustible – Interchangeabilité de la puissance et des données





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## IEC 62282-6-400

Edition 1.0 2019-05

# INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

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## FUEL CELL TECHNOLOGIES -

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

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International Standard IEC 62282-6-400 has been prepared by IEC technical committee 105: Fuel cell technologies.

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

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.

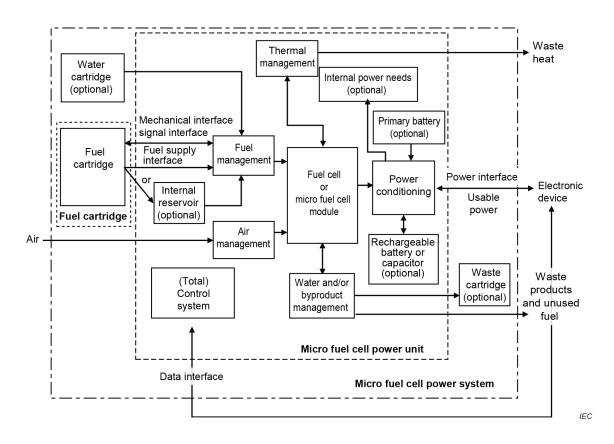


Figure 1 – Micro fuel cell power system and micro fuel cell power unit block diagram



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