



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 27748.2-2022

**Stationary fuel cell power system - Part 2: Performance test
methods**

Issued on: March 9, 2022

Implemented on: October 1, 2022

Issued by: SAMR; SAC

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Foreword

This document is drafted in accordance with GB/T 1.1-2020 "Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

The document is Part 2 of GB/T 27748 "Stationary fuel cell power system". GB/T

27748 has issued the following parts.

- Part 1.Safety;
- Part 2.Performance test methods;
- Part 3.Installation;
- Part 4.Performance test methods for small fuel cell power systems.

This document replaces GB/T 27748.2-2013 "Stationary fuel cell power systems - Part

2 Performance test methods". Compared with GB/T 27748.2-2013, in

addition to

structural adjustment and editorial changes, the main technical changes are as follows.

- Delete the terms and definitions of "Audible noise level", "Emission characteristics", "Parasitic load", "Pressure", "Secondary thermal power", and "Standby state (idle state)" (see 3.1.1, 3.1.8, 3.1.18, 3.1.21, 3.1.25, and 3.1.29 of the 2013 edition);
- Add terms and definitions of "External thermal energy", "Noise level", "Pre-generation state", "Rated power", "Total power input", and "Waste water" (see 3.1.7, 3.1.14, 3.1.20, 3.1.22, 3.1.33, and 3.1.35);
- Add the content of operating process (see 3.2);
- Modify some test contents in Table 2 (see Table 2; Table 2 of the 2013 edition);
- Delete "Exhaust gas flow measurement" and "Hydrogen concentration measurement" (see 7.3.7 and 7.3.7.9 of the 2013 edition);
- Add requirements for gas sampling (see 7.3.7.1);
- Modify "Audible noise level measurement" to "Noise level test" (see 7.3.9; 7.3.9 of the 2013 edition);
- Add criteria for attaining the steady-state set value (see 9.3.2);
- Add requirements for maximum acceptable instantaneous power output transient (see Annex D).

This document is identical to IEC 62282-3-200.2015 "Fuel cell technologies - Part 3-

200 Stationary fuel cell power systems - Performance test methods".

The following editorial change has been made to this document.

- Change the standard name to "Stationary fuel cell power system - Part 2. Performance test methods".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

This document was proposed by China Electrical Equipment Industry Association.

This document shall be under the jurisdiction of National Technical Committee 342 on Fuel Cell and Flow Battery of Standardization Administration of China (SAC/TC 342).
Drafting organizations of this document. North China Electric Power University; Guangzhou Yunqing Testing Technology Co., Ltd.; Shanghai Shenli Technology Co., Ltd.; Dalian Institute of Chemical Physics, Chinese Academy of Sciences; Nanjing University; Wuhan University of Technology; Tongji University; Tsinghua University; China Quality Certification Centre; Machinery Industry Beijing Electrotechnical Institute of Economic Research; Wuxi Institution of Supervision & Testing on Product Quality; Shenzhen Institute of Standards and Technology; Shanghai Pearl Hydrogen Energy Technology Co., Ltd.; Xinyan Hydrogen Energy Technology Co., Ltd.; Weichai Power Co., Ltd.; Yutong Bus Co., Ltd.; Beijing Long March Tian Min Hi-Tech Co., Ltd.; Nekson Power Technology Co., Ltd.; China Automotive Technology and Research Center Co., Ltd.; No. 712 Research Institute of China Shipbuilding Industry Corporation; Global Energy Interconnection Research Institute Co., Ltd.; Great Wall Motor Co., Ltd. Baoding Hydrogen Testing Branch; Weifu High-Technology Group Co., Ltd.; China Automotive Engineering Research Institute Co., Ltd.; Haidriver (Qingdao) Energy Technology Co., Ltd.; Shanghai Hydrogen Propulsion Technology Co., Ltd.; Tianjin University.

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The previous editions of this document and the documents it replaces are as follows.

- It was first issued in 2013 as GB/T 27748.2-2013;
- This is the first revision.

1 Scope

This document covers operational and environmental aspects of the stationary fuel cell