

ICS 27.160
CCS F12



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

GB/T 48102-2026

**Coupled environmental stress test method and performance
requirement for photovoltaic modules**

光伏组件耦合环境应力试验方法及性能要求

(English Translation)

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Foreword

GB/T 48102-2026 is a recommended national standard (GB/T) of the People's Republic of China, issued on 28 August 2026 by the State Administration for Market Regulation and the Standardization Administration of China, with effect from 1 December 2026.

It is under the responsibility of the Ministry of Industry and Information Technology (Electronics).

Classification: ICS 27.160; CCS F12.

1 Scope

This standard specifies a coupled environmental stress test method and performance requirements for photovoltaic modules. Rather than applying single stresses one at a time, a coupled approach combines environmental influences, which reflects the fact that modules in outdoor service face several factors acting together over many years.

Module manufacturers can use it in design validation and quality control, while independent test laboratories, certification bodies, project developers and investors may refer to it when comparing module durability. It is a recommended (voluntary) national standard taking effect on 1 December 2026. As a voluntary standard, it applies in practice when a contract, a certification scheme or an internal quality procedure refers to it. Buyers comparing modules from different suppliers can use the same reference when asking how durability has been assessed, and engineers can align their qualification plans with a national method.