

HUWOR Co-Drafted Q/GDW 12082-2021

State Grid Technical Standard for IoT Wireless Sensors in Power Transmission & Transformation

About the standard

Q/GDW 12082-2021, titled Technical standard of wireless sensors for the internet of things for power transmission and transformation equipment, is an enterprise standard issued by State Grid Corporation of China (SGCC). It was published and implemented on 2021-12-06.

The standard specifies requirements for the types, naming, identification, technical requirements, testing, inspection rules, marking, packaging, transport and storage of wireless sensors. It applies to wireless sensors used on power transmission and transformation equipment at 35 kV and above, and may be referenced by sensors at other voltage levels.

It defines product-level specifications covering sensor classification, power supply modes (P1–P4) and environmental and electromagnetic compatibility (EMC) tests — the same categories that shape the design of the wireless sensor products HUWOR manufactures.

Drafting participation

Zhuhai Huawang Technology Co., Ltd. (HUWOR) is listed among the drafting organisations of Q/GDW 12082-2021. The drafting organisation list includes the company alongside the drafting institutes and manufacturers of the State Grid system, and the participation is publicly verifiable.

As an SGCC enterprise standard, Q/GDW 12082-2021 is not published on the national standard platform; publicly available copies circulate through third-party standard sites, while the official distribution remains within the State Grid internal standard system.

Why the standard matters to customers

HUWOR sensor naming and identification follow the standard's conventions.

Power supply modes and environmental test requirements are built into the product design, not merely checked afterwards.

Wireless sensors are designed for interoperability within the State Grid IoT architecture.

For utilities and integrators deploying wireless sensor networks in substations and on transmission lines, Q/GDW 12082-2021 is the reference that defines what a compliant wireless sensor must satisfy. HUWOR's drafting participation means its sensors were designed with direct knowledge of the specification's intent.

About Huawang Technology (HUWOR)

Zhuhai Huawang Technology Co., Ltd. (HUWOR) is a national high-tech enterprise established in 2010, specialising in condition monitoring and assessment of power equipment. The company supplies smart sensors, testing instruments and online monitoring systems for partial discharge detection, with R&D; centres in Zhuhai and Xi'an, over 50 patents, 63 software copyrights and ISO 9001 certified manufacturing. HUWOR supports OEM and ODM projects for distributors and system integrators worldwide.

www.huwor.net | sales@huwor.com.cn