

Smart Grid Services

Global Testing, Inspection and Certification Solutions









Challenge

The Smart Grid is bringing rapid changes to the electricity industry. These changes impact all aspects of the industry, from power generation, to transmission and distribution, to new standards and regulations, and finally to the end consumer. Governments and private industry are spending billions of dollars in this upgrade of the electric grid.

While these changes bring significant benefit to society at large, all stakeholders have to be prepared to mitigate the risks that come with new technology. Recent examples of utilities and their device partners facing public and regulatory scrutiny over inaccurate devices or inadequate planning in implementation of the smart grid have only added to the need to adequately test and certify devices and verify your deployment plans.

Having a highly experienced partner to assist you in your smart grid deployment is essential in reducing your risks and improving your exports, brands and image.















Intertek

Intertek



Intertek Services

Intertek provides testing, evaluation and certification services for EU (CE) and North American market (ETL/cETL) for Smart Grid devices with the corresponding UL, CSA, IEC, EN, as well as other national and international standards.

Our services can assist you with deploying your devices and Smart Grid programs in a speedy and cost efficient manner. We can help you prepare for changing standards and regulatory requirements specific to the electricity industry. Our services add to your Smart Grid value proposition and reduce your risk of failure.

Intertek is an OSHA-recognized NRTL (Nationally Recognized Testing Laboratory) in the United States and accredited by the Standards Council of Canada (SCC) as a Testing Organization (TO) and Certification Organization (CO).

Why Intertek?

We work faster and harder to bring new technologies to the marketplace, just like you. Our engineers and consultants have years of product and industry specific expertise, ensuring your testing program runs quickly and efficiently at all times.

With our global network of laboratories we can provide local service no matter where your installation or manufacturing facilities may be. Intertek's testing and certification facilities are accredited by signatories to the International Laboratory Accreditation Cooperation (ILAC) and International Accreditation Forum (IAF) agreements (ISO 17011). Certification activities performed by us meet ISO Guide 65 and our laboratories and facilities are accredited to ISO 17025.

Intertek lab's IECEE CB Scheme accreditation allows Intertek to conduct one set of tests that will provide manufacturers with market access to more than 40 countries that participate in the CB Scheme, saving manufacturers money and reducing their overall time-to-market.

Device Testing

- Smart Meter
- "Smart" Appliances
- o HVAC
- o Refrigerators
- o TV
- o White goods
- EV Charging Stations
- Distributed Generation and Renewable Resources
 - o Inverters and Converters for Traditional and Renewable Energies
 - o Battery and Energy Storage
- o Photovoltaic (PV) Modules
- o Small and Large Wind turbines
- o Fuel Cells
- o Micro-CHP (Combined Heat & Power)
- o Biomass, Tidal, etc.

Testing Services:

- Interoperability Testing
- o Security Layer (AES 256, PKI, etc)
- o Transport Layer (including Ethernet, IP, TCP, HTTP, and OPC)
- o Media Layer (to fiber optics, microwave, WiFi, CATV, wires, telephones and cell phones)
- o Application Layer (HTML, XML, IEC 61850, etc)
- Meter Accuracy Testing (ANSI C12)
- Product Safety Testing
- Compliance to ANSI, IEEE, UL, CSA, AS/NZS and IEC Standards

Other Intertek Smart Grid Services

- Advisory Services
- o Demand Response and Portfolio Optimization
- o Renewable Integration
- o Smart Grid Value Proposition
- o Grid Asset Management
- Energy Efficiency Testing
 - o Energy Guide Label (US)
 - o Natural Resources (NRCan) (Canada)
 - o Eco Label (Europe)
 - o European Energy Label (Europe)
 - o Energy Label (China)
 - o Green Mark (Taiwan)
- o Battery and Energy Storage
- o Photovoltaic (PV) Modules
- o Small and Large Wind turbines
- o Fuel Cells
- o Micro-CHP (Combined Heat and Power)
- o Biomass, Tidal, etc.
- EMC Testing
- Environmental & Vibration Testing
- Surge Testing
- ESD Testing
- Energy Efficiency Testing
- PV Testing
- o Building-Integrated Photovoltaics (BIPV) Testing
- o Solar Panel Testing (Photovoltaic Modules)
- o Solar Thermal System Testing
- Battery and Energy Storage Testing

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