

The BSI Kitemark[™] for The Internet of Things



Secure trust and confidence in your brand's connected devices with the BSI Kitemark



What is the Internet of Things (IoT)?

The IoT is a network of connected smart devices, people and systems, enabling data to be exchanged, combined and analyzed to drive efficiency and innovation.

IoT spans all kinds of smart devices; from mobile phones, coffee makers, washing machines to door locks, CCTV cameras and office lighting, to name but a few. The opportunities to positively impact our lives and businesses are endless, but the complexity of IoT makes it difficult to build trust in new products and services.

While there are many benefits to the IoT, consider the following challenges:

- Is it safe?
- Is it secure?
- Will it work?
- Will it work with everything else?
- ...for as long as I need it?

Recent high-profile breaches have demonstrated the potential security risks to products ranging from smart watches to dolls.



78% of consumers don't trust smart home technology*



62%

say the biggest fear about living in a smart home is hacking*

*Smart Home Week Forum 2018

Prove your products can be trusted

BSI have created a trusted framework to shape, share, embed and support innovation, and the safe and reliable use of IoT applications, data and devices, reassuring our clients and their customers that their IoT enabled product or system is safe and secure.

Our state of the art IoT laboratory enables us to address the increasing security concerns associated with connected devices. We also offer assurance for IoT functionality and interoperability through our BSI Kitemark scheme.

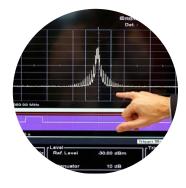
BSI Kitemark



The BSI Kitemark provides you with a label of trust. It has been developed in collaboration with industry stakeholders, to help consumers confidently identify connected products which they can trust to be

safe, secure and fit for purpose. These devices will have been rigorously tested to make sure they function and communicate as they should, and that the appropriate security controls are in place.







Benefits of achieving the IoT BSI Kitemark



The BSI Kitemark is the original mark of trust, since 1903. It enables you to:

- · Build and protect your brand
- Increase your customer base and customer satisfaction
- · Command price premiums
- Gain competitive advantage

BSI Kitemark scheme requirements:

There are three different types of BSI Kitemark for IoT Devices:

Residential

Products used in a residential environment

Commercial

Products used in a commercial environment

Enhanced

Residential or commercial products for high value/ high risk applications

Residential

Penetration Testing Vulnerability Testing



Commercial

Deeper
Penetration Tests
Penetration
Testing
Vulnerability
Testing



Enhanced

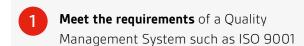
Advanced Penetration Tests

Deeper Penetration Tests

> Penetration Testing

Vulnerability Testing

You will need to:



Pass the following tests:

- Functionality relevant product performance and safety tests
- Interoperability testing between devices and the internet
- Security penetration testing scanning for vulnerabilities and security flaws
- Receive on-going, regular monitoring and assessment comprising:
 - Functional/interoperability tests
 - Penetration tests
 - Kitemark audit to review the penetration results in context of the product, and review what actions have been taken

We also offer:

Verification

The design of effective security protocols in all consumer IoT enabled devices is a priority for all businesses. We work with our clients to verify their security guidelines so their customers can be confident the product is secure for its intended use.

Testing

We support providers of IoT devices who put the safety and security of their customers at the heart of their business by working with them at early stages of development.

Training

Our courses provide an insight into IoT technologies. Helping you to identify the main IoT system components and how they interact. Understand the interoperability challenges, cybersecurity threats and where IoT can provide the greatest benefits.

To find out more

visit: bsigroup.com/iot

Why BSI?



Our experts have a vast amount of experience where it matters most. Whether it's cyber-security, product quality or performance, sustainability or risk management, whatever your concern our experienced experts are here to help and support you. Working collaboratively with our clients, we focus on creating innovative





Member of the IoT Security Foundation, sharing best practice and knowledge solutions to relevant problems. Our goal is to help you add value to your product and brand whilst reducing risk.

As a global organization we have the scale and reach to support organizations large and small. Our technical capability and customer-focused approach ensure we're recognized as a worldwide leader.



About BSI

BSI is the business improvement company that enables organizations to turn standards of best practice into habits of excellence. For over a century BSI has championed what good looks like and driven best practice in organizations around the world. Working with over 86,000 clients across 193 countries, it is a truly international business with skills and experience across a number of sectors including automotive, aerospace, built environment, food, and healthcare. Through its expertise in Standards Development and Knowledge Solutions, Assurance and Professional Services, BSI improves business performance to help clients grow sustainably, manage risk and ultimately be more resilient.

To learn more, please visit: bsigroup.com

Find out more

Visit: bsigroup.com/iot



Copyright ©2022, The British Standards Institutuion. All rights reserved. BSI/UK/2023/PC/0222/EN/BLD