

# oneIDentity+

## Authentication with QR codes

The distinct marking of products with GS1 compliant DataMatrix codes is already widespread. Alternatively the use of a serialized QR code can open up entirely new possibilities in the Asian region.



The GS1 compliant DataMatrix code is a globally established standard for the serialized marking of products in the B2B area of railway, machine & plant manufacturing, shipbuilding, pharma & medical technology, as well as the automotive industry. This code is very secure but can only be read with special apps like, for example, the oneIDentity+ app. In the B2C area, the use of a QR code, which can be read with every device without the need for a special app, is often a sensible alternative. Together with tesa scribos®, oneIDentity+ has developed a solution to use serialized QR codes for the authenticity check.



### GS1 DataMatrix Code

(01)04053063134515(21)E3SS8TW4ZAAR261E

- Complies with the globally distinct numbering system according to ISO 15418:2016 and contains the unique and global item number GTIN
- Fulfills customer demands around the world in technical industries such as railway (B2B)
- Printable/Engravable in small format (e.g. 6 mm x 6mm)
- Higher barrier to entry, because scan only possible with special app (for example oneIDentity+ app)



### QR-Code

<http://tcnc.eu/B0QR-088LYB9FZJ5M2W5X09>

- Content not standardized; Usually contains a URL and in this case a serial number – can be complemented with a GTIN
- Recommended for the B2C area, as the scan is possible with every QR code reader (low barrier of entry)
- Requires separate answer page, but no special app – also readable with WeChat (important for China)
- Less secure, since a similar QR can be used to link to a fake website

### The challenge

For many years, a lot of manufacturers in the automotive after-market and other industries have been relying on oneIDentity+ for the authentication of products and in the fight against product piracy. Typically, a serialized GS1 compliant DataMatrix code is used. This code format is considered to be the standard for the serialization of products in the B2B area – especially in the technical industries. It is standardized, meaning it is interpretable globally and can be printed or engraved in very small format.

To scan and correctly interpret the code the oneIDentity+ app – a secure and central starting point for the authenticity check – is required. Depending on the manufacturer, the oneIDentity+ app offers many different functionalities beyond the authenticity check like the linking to installation instructions from the manufacturer, TecDoc product information etc.

Nevertheless, the end user faces the challenge to install a special app to check the authenticity of a spare part – even though he can subsequently use this app for the products of various different manufacturers.



Serialization

Social Media

Beyond Authenticity Check

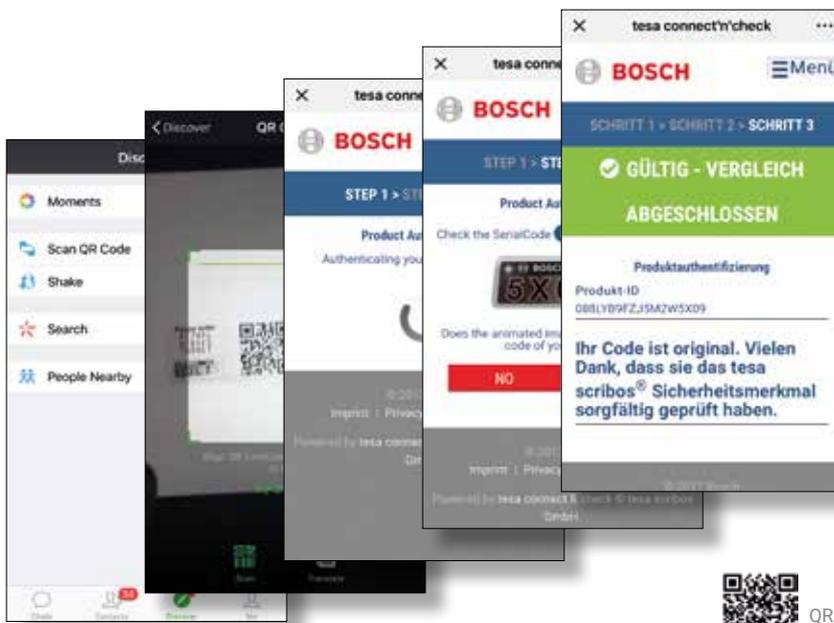
WeChat in Asia

QR Code versus GS1 DataMatrix Code

B2C

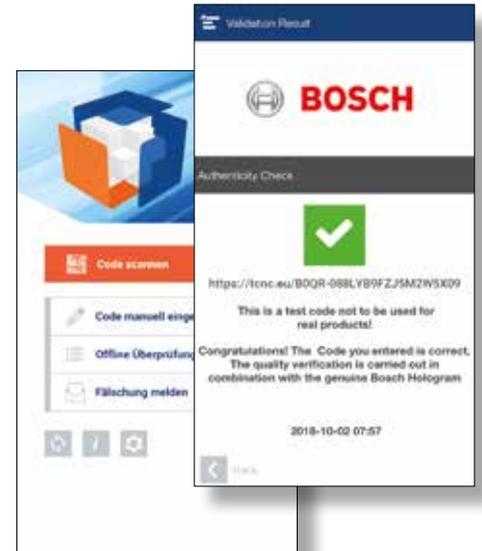
1D<sup>+</sup>  
oneIDentity<sup>+</sup>

## QR-Code Scan with WeChat



QR code of a Bosch Product

## QR-Code Scan with the oneIDentity+ App



### The solution

As an alternative to the unique GS1 DataMatrix code the QR code can be used, which also contains a serial number.

This code, which doesn't necessarily follow international standards, is the preferred choice in the B2C area and contains, a URL and a serial number. This way the code can be scanned by any QR code reader and subsequently call a separate website showing the result of the authenticity check with the help of the oneIDentity+ database.

Therefore no special app is needed to authenticate products. Especially in Asia, the authenticity of a product can also be checked via the widespread WeChat app.

The disadvantage of a QR code is that it needs to be printed in a relatively large format and the fact that it is easy to replicate an according website with the check result.



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### The application

Well-known suppliers in the independent automotive after-market like Bosch and Motorservice have begun to apply QR code based product labels, especially in the Asian region. Together with our partner tesa scribos®, we were able to offer these customers a comprehensive solution.

Other manufacturers will also be able to benefit from the experiences gained through the feedback of the end customers regarding the authenticity check via serialized QR codes.

#### Try it yourself!

Open any QR code reader on your smartphone and scan the QR code of a Bosch product above.

**For more information visit our homepage [www.one-identity-plus.com](http://www.one-identity-plus.com) or just call us!**

#### What makes oneIDentity+ GmbH special?

We offer flexible, mobile services based on worldwide valid standards for the challenges around product protection and Track & Trace in Industry 4.0 and IoT. As a subsidiary company of TecAlliance GmbH and solution partner of GS1 Germany, oneIDentity+ GmbH is your neutral and reliable partner for your digital business.

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