THE LABEL CENTRE
SOLUTIONS FOR THE LABELLING INDUSTRY

QR Codes

What is a QR Code?

QR is the abbreviated term for Quick Response. A QR Code is a quick-reading 2D black and white square barcode, which stores information that can be browsed when scanned by smartphones. It is an image containing small dots which hold pieces of information. The information can be used to open a website, create an email, make a call, send a message or find a location. Machine-scanning involves handling of the smartphone's built-in camera or via external downloadable apps. A single code holds a huge amount of data, storing up to 4296 characters and 7089 digits.

How to Create a QR Code?

QR Codes can be generated easily online and is cost-effective. When looking for QR code generators make sure to look for reviews, customer support options, key features, cost, and ease of use.

Choose between a static or dynamic QR's.

Static QR Codes cannot be changed. Once printed and if the link is broken, there is nothing you can do except reprint a new one.

Dynamic QR Codes on the other hand, are editable and can be edited in real time.

Once you have selected your type of QR Code (URL, PDF, Social Media, Google Maps etc), enter all the fields, ensuring everything is correct as the content cannot be altered once printed.
You can customise your design by selecting specific colours and changing the shape of corner and body elements. You can add your logo or image to complete the design.
Finally, select the pixel resolution and preview the code. The higher the resolution the better quality the PNG thus ease of scanning. Ensure the codes are tested by scanning them with a QR code scanner.
Other formats you can download in include: JPEG, SVG, EPS or PNG. For complete design in vector format SVG is preferred for working in software such as Adobe Illustrator.

A QR code is made up of two elements:

1. Three squares in the corners of the QR code, which allow the scanner to navigate the code.

2. The QR code itself, which is embedded as a pattern and holds the information.

What is the Size of a QR Code?

The minimum size of a QR Code should be 2cm x 2cm. However, the size of the QR Code depends on the medium of the outlet chosen. For best results use this formula:

Size of the QR Code = Distance between the QR Code and the scanner / 10
For instance, if a QR Code is 33 cm, it can be read from as far as 3.3m.
The size of the QR Code is determined by the size of its modules and the version of the QR Code.
The module refers to the black and white dots that make the data pattern (the form of rows and columns are called the data matrix) and the version to use depends on the data to be encoded.

QR Codes

There are two versions:

Version 1 (21x21 modules) the original code with a maximum of 14 versions (73x73 modules) capable of storing 1,167 numerals. Each version adds 4 modules per side.

Version 2 (25x25 modules) the improved model of version 1 with a maximum of 40 versions (177x177 modules) capable of storing 7,089 numerals.

If 0.5mm is the module size, the size of the QR Code will be 12.5 mm x 12.5 mm. A white space of 4 modules must be placed around the code to use it. This version can be read smoothly even if it is slightly distorted or printed on curved surfaces due to the embedded alignment pattern. The modern QR code usually refers to version 2.

Bulk Generation

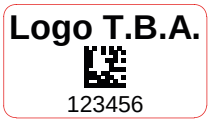
Some QR providers, such as the Label Centre, offer a bulk generation option. This applies when you have a large value such as 20,000 codes each with a unique ID. You need to provide a spreadsheet of data to be encoded eg:

Company Name	Location	Number	URL
The Label Centre	Netherton	LC00001	www.labelcentre.co.uk
The Label Centre	Netherton	LC00002	www.labelcentre.co.uk

Minimum Label Sizes

QR Code - 6 digit code - label size 25mm x 16mm

Datamatrix Code - 6 digit code - label size 25mm x 14mm



No Logo - QR Code - 6 digit code - label size 15mm x 15mm