

# The `epcqr` package\*

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February 07, 2024

## 1 Introduction

This package is a wrapper for the `qrcode` package. It offers an easy way to generate valid EPC QR codes by providing syntax and validity checks, e.g. verifying the correctness of the IBAN.

## 2 Usage

`\epcqr` The `\epcqr` command uses the L<sup>A</sup>T<sub>E</sub>X-builtin key-value system to parse the user input. There are 3 mandatory keys to produce a valid EPC QR code: `name`, `iban` and `amount`. The following code produces a minimal example.

```
\epcqr{
  name=Wikimedia Foerdergesellschaft,
  iban=DE33100205000001194700,
  amount=123.45,
}
```



Note, that the maximum payload is limited to 334 bytes. More specific information can be found in the guidelines<sup>1</sup>. As of now the user is responsible to stay within this limit, if they are using characters which are not part of following character set: (As specified under section 1.4 in the Customer-to-PSP Implementation Guidelines<sup>2</sup>)

a b c d e f g h i j k l m n o p q r s t u v w x y z  
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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\*This document corresponds to `epcqr` v1.0, dated 2024-02-07.

<sup>1</sup><https://www.europeanpaymentscouncil.eu/document-library/guidance-documents/quick-response-code-guidelines-enable-data-capture-initiation>

<sup>2</sup><https://www.europeanpaymentscouncil.eu/document-library/implementation-guidelines/sepa-credit-transfer-customer-psp-implementation>

0 1 2 3 4 5 6 7 8 9  
 / - ? : ( ) . , ' +  
 Space

Additionally to the mandatory arguments, the user can provide more information:

**bic** (Optional) The BIC code of the Beneficiary Payment Service Provider.

**name** (Mandatory) The name of the Beneficiary. Maximum length is 70 characters.

**iban** (Mandatory) The IBAN of the account of the Beneficiary

**amount** (Mandatory) Amount of the SEPA Credit Transfer in euro. Amount must be larger than or equal to 0.01, and cannot be larger than 999999999.99.

**reason** (Optional) Purpose of the SEPA Credit Transfer.

**ref** (Optional) The Remittance Information (a structured creditor reference code).  
 Note: If a reference code is given **text** must be empty.

**text** (Optional) The Remittance Information (an unstructured text). Maximum Length is 140 characters. Note: If a text is given **ref** must be empty.

**information** (Optional) Additional information for the user. Maximum Length is 70 characters.

### 3 Options

Since this package is a wrapper for the `qrcode` package, all of its options can also be specified here using the `\qrset` command.

```
\begin{document}
  \qrset{height=5cm}%
  \epcqr{
    name=Wikimedia Foerdergesellschaft,
    iban=DE33100205000001194700,
    amount=123.45,
  }
\end{document}
```

Changing the level of the QR code does not have an effect, as EPC QR codes have a set level.