

Wirecard CEE Integration Documentation



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Credit Card

General information

A credit card is a payment card issued to consumers as a payment method allowing the card holder to pay for goods and services based on the holder's promise to pay for them. The issuer of the card creates a revolving account and grants a credit line to the card holder from which the card holder can borrow money for payment.

A credit card is issued to a consumer at the time or after an account has been approved by the credit provider, which need not be the same entity as the card issuer. When a purchase is made, the card holder agrees to pay the card issuer and agrees to pay by signing a receipt with a record of the card details and indicating the amount to be paid or by entering a PIN (personal identification number).

For transactions where the card is not shown (e.g. e-commerce, mail order, and telephone sales), merchants additionally verify that the consumer is in physical possession of the card and is the authorized user by asking for additional information such as the CVC (card verification code), date of expiry, and billing address.

Each month, the card holder receives a statement indicating the purchases made with the card, any outstanding fees, and the total amount owed.

Please visit [Credit card](#) for further information and details.

Advantages for merchants

- Reduction of back-office expenses of processing checks/cash and transporting them to the bank.
- Extra turnover since the consumer purchases goods and/or services immediately and is less inhibited by the amount of cash in his pocket and the immediate state of his bank balance.

Advantages for consumers

- Very convenient payment method.
- Small short-term loans provided the total charges do not exceed the maximum credit line for the card.
- Many credit cards offer rewards and benefits packages.
- Reward points which may be redeemed for cash, products, or airline tickets.

Supported brands

Brand name	Description
American Express	American Express including American Express SafeKey
Diners Club	Diners Club
Discover	Discover
JCB	JCB including J/Secure™
Maestro SecureCode	Maestro SecureCode
Mastercard	Mastercard including Mastercard SecureCode
UATP	UATP
Visa	Visa including Verified by Visa

BIN ranges

Credit card numbers, as imprinted on each credit card, share a common numbering scheme. Following this scheme, you may derive the relevant brand from the first digits, the so called Bank Identification Number (BIN), of the credit card number.

The following table provides an overview of the most important digits and the relevant associated Credit Card brands.

Brand	Number of digits	BIN range
American Express	15	34xx xxxx xxxx xxx
	15	37xx xxxx xxxx xxx
Diners Club	14	300x xxxx xxxx xx ...
		305x xxxx xxxx xx
	14	36xx xxxx xxxx xx
	14	38xx xxxx xxxx xx
JCB	16	3xxx xxxx xxxx xxxx
	15	2131 xxxx xxxx xxx
	15	1800 xxxx xxxx xxx
Mastercard	16	50xx xxxx xxxx xxxx ...
		55xx xxxx xxxx xxxx
	16	2221 xxxx xxxx xxxx ... 2720 xxxx xxxx xxxx
Visa	16	4xxx xxxx xxxx xxxx
	13	4xxx xxxx xxxx x

You can find more details in the Wikipedia article regarding Bank card numbers.

Acquirers

For credit cards there are different acquirers. For an overview of the acquirers and which **features, brands and countries are supported by each acquirer** visit the overview of available acquirers.

Authorizations and pre-authorizations

Authorization is the procedure of approving (authorizing) credit card transactions and reserving the respective amount (which is then unavailable for the consumer) until the merchant captures (deposits) the transaction. I.e. if the consumer in your online shop uses a credit card to pay for the relevant items during the payment process, a verification takes place of whether there are sufficient funds available to cover the transaction. If there are sufficient funds, the respective amount is “reserved” or blocked and deducted from the consumer's individual credit limit. However, at this point no money is actually transferred to you. After you carry out a capture of such authorized transactions or amounts and submit the transactions to your acquirer, the money will be transferred from your consumers' account to your bank account. This is not an immediate process and, depending on the relevant acquirer, may take **up to 7 days** during which the authorizations remain valid.

If the consumer's credit card limit is reached, the respective transactions will be declined when effecting an authorization.

Pre-authorization refers to an authorization of a transaction which will take place at a later time, e.g. for hotel booking, car rentals or items with varying delivery times.

After successfully verifying the validity of the credit card, the funds in question are “reserved”. Such pre-authorizations remain valid for a certain period of time, usually **28 days**, defined by the acquirer. The consumer's credit limit is reduced by the relevant amount and thus not available to the consumer. During this time the amount can be captured. If the deadline has passed, the amount is again available to your consumer and it is no longer possible to capture the amount.

Split captures and pre-authorization

Split captures, i.e. the capturing of multiple authorized amounts up to the limit of the total authorized amount, are only possible when pre-authorizations are made. As a merchant you benefit from the possibility of effecting split captures if e.g. some of the items of a transaction/purchase are captured immediately at the moment of shipment, while others are not available and will be captured at a later moment when they are available for shipment.

Please note that split captures are not supported by all acquirers. At the moment, split captures (based on pre-authorizations) are only supported by Wirecard Bank for American Express, Diners Club, Mastercard, and Visa but currently not for JCB.

For enabling this feature, please contact our support teams.

Wirecard Fraud Prevention Suite

The Wirecard Fraud Prevention Suite (FPS) is a risk management system which can reduce the risk of payment default. For more information visit [Wirecard Fraud Prevention Suite](#) or contact our sales teams.

Order flow diagram

For a visual representation of the order flow behavior and associated transaction-based operations of this payment method we invite you to have a look at the respective order flow diagram.

Optional request parameters

Depending on the relevant acquirers for credit cards, the optional request parameters `customerStatement` and `orderReference` are more restricted with regard to their length and allowed characters than are other general request parameters.

The following specifications and restrictions apply for the parameter `customerStatement`:

Acquirer	Brand	Data type	Short description
Wirecard Bank	American Express, Diners Club, Discover, JCB, Maestro SecureCode, Mastercard, Visa		Text displayed on bank statement issued to your consumer by the financial service provider. <code>customerStatement</code> consists of 2 descriptors which are separated by *.
		ASCII with a variable length of up to 12 characters.	StaticDescriptor is specified by Wirecard Bank compliance and is the same for each transaction.
		ASCII with a variable length of up to 12 characters.	DynamicDescriptor is optional, configurable and has to be activated.

SIX Pay	Maestro SecureCode, Mastercard, Visa	ASCII with a variable length of up to 254 characters.	Text displayed on bank statement issued to your consumer by the financial service provider.
Evalon	Diners Club, Discover, JCB, Maestro SecureCode, Mastercard, Visa		
ConCardis	Maestro SecureCode, Mastercard, Visa		
American Express	American Express		
B+S	JCB, Mastercard, Visa		
SIX Payment Services	Maestro SecureCode, Mastercard, Visa		
DC Bank	Diners Club		
card complete	JCB, J/Secure™, Maestro SecureCode, Mastercard, Visa	Variable length of up to 4 characters. Allowed characters are [0-9]+\$	
Hobex	Maestro SecureCode, Mastercard, Visa	customerStatement is not used. Instead, the name of the merchant is always displayed on the consumer's bank statement.	

The following specifications and restrictions apply for the parameter orderReference and merchantReference:

Acquirer	Brand	Data type	Short description
Wirecard Bank	American Express, Diners Club, Discover, JCB, Maestro SecureCode, Mastercard, Visa	ASCII with a variable length of up to 32 characters. Allowed characters are [0-9a-zA-Z].	Unique order reference ID sent from merchant to financial institution.
SIX Pay	Maestro SecureCode, Mastercard, Visa		
Hobex	Maestro SecureCode, Mastercard, Visa		
Evalon	Diners Club, Discover, JCB, Maestro SecureCode, Mastercard, Visa		
ConCardis	Not supported		
American Express	American Express		
B+S	JCB, Mastercard, Visa		
SIX Payment Services	Maestro SecureCode, Mastercard, Visa		
DC Bank	Diners Club	ASCII with a variable length of up to 128 characters.	
card complete	JCB, J/Secure™, Maestro SecureCode, Mastercard, Visa	ASCII with a variable length of up to 25 characters.	

Additional request parameters

Additional request parameters are only required when using credit cards and the **payment facilitator model** in your online shop based on Wirecard Checkout Page or Wirecard Checkout Seamless.

For merchants with the Merchant Category Code 6012 who reside in the UK, additional request parameters regarding **recipient data** may be required.

Additional optional request parameters for recurring payments

According to credit card company requirements for risk minimization, there are two parameters for recurring payments for Wirecard Checkout Page and Wirecard Checkout Seamless:

Parameter	Data type	Short description
merchantTokenizationFlag	Boolean	Sets whether credit card details are stored for later use.
periodicType	Enumeration	Sets the periodic type of initial and recurring payments.

Additional response parameters

When using the payment methods Credit Card and Credit Card - Mail Order and Telephone Order in your online shop, Wirecard will return additional parameters to your online shop. These parameters are specific to the above mentioned payment methods.

Parameter	State	Data type	Short description
anonymousPan	Success	Numeric with 4 numbers.	Last four digits of the credit card number.
authenticated	Success	Boolean	Returns YES if the card holder has been successfully authenticated, otherwise NO.

The parameter `authenticated` is always returned if the payment was successful. If the consumer was authenticated by an additional security method, such as 3-D Secure, Mastercard SecureCode, Verified by Visa, YES will be returned. NO will be returned if no additional authentication took place.

Optional feature-specific parameter for Wirecard Checkout Page and Wirecard Checkout Seamless

This optional feature-specific response parameter enhances the functionality and usability of the payment process regarding specific features and functions and is enabled by Wirecard on your behalf. To enable this parameter please contact our support teams.

Parameter	State	Data type	Short description
hashedPan	Success	Alphanumeric with a fixed length of 128 (hash mechanism HMAC-SHA-512).	Hashed credit card number.

This parameter can be used to check if a certain credit card has been used by your consumer before,

i.e. for recognizing a new registration with a different name but with the same credit card. You can safely store this hash without circumventing PCI compliance.

hashedPan is returned to the confirmUrl and contains a HMAC-SHA-512-hash of your consumers credit card number.

Please be aware that due to PCI DSS compliance, hashedPan cannot be returned neither with maskedPan nor anonymousPan.

Optional feature-specific parameters for Wirecard Checkout Page

These optional feature-specific response parameters enhances the functionality and usability of the payment process regarding specific features and functions and are enabled by Wirecard on your behalf. To enable these parameters for your account please contact our support teams.

Parameter	State	Data type	Short description
cardholder	Success	Alphabetic with a variable length of up to 80.	Name of holder of credit card which can only be used if the acquirer supports it.
expiry	Success	Numeric with special characters and a fixed length of 7.	Expiry date of credit card in format "mm/yyyy".
maskedPan	Success	Numeric with special characters and a variable length of up to 19.	PCI-compliant masked card number in the format: first 6 digits and last 4 digits of card number with "*" in between depending on the current format of the card number.

Please note that the above mentioned response parameters are enabled by default when you use Wirecard Checkout Seamless in your online shop.

Address Verification System (AVS)

By means of AVS it is verified whether the billing address of the credit card matches the address that was given by the consumer in the online shop, i.e. the system checks the billing address of the credit card provided by the consumer with the address on file at the credit card company.

If you want to use the Address Verification System, please contact our support teams for enabling the additional response parameters listed on the page for your account.

Definition of terms

For the definitions of the most common terms used in relation to credit cards, such as issuer, acquirer, 3-D Secure, and Address Verification System (AVS) consult our Glossary.

FAQ

Why can I not reverse a deposit?

Reversing deposits using the back-end operation `depositReversal` or in the Wirecard Payment Center may not be possible at the same day since the deposit may still be in process. Please perform the operation `refund` on the next day.

Which problems might occur when effecting recurring payments on credit card basis?

Generally, payments for the source order number must not be older than 400 days. If the order is older than 400 days, an error message is displayed.

Also, if the expiration date of the credit card used for the stored source order was exceeded, an error message is displayed.

In both error cases you have to obtain the new credit card details from your consumer and initiate a new order since it is not possible to carry out a recurring payment.

If 3-D Secure is forced, no recurring payments are possible.