

# POS Payment VPN



The scope of this documentation is to provide towards different POS partners the specifications of Computop Paygate POS API so that they can integrate and process POS payments towards different acquirer connections.

**IMPORTANT:** Based on the connection type desired i.e P2PE, VNP or SSL certain parameters will become mandatory and vice versa. The same also applies when specific payment methods are implemented such as SEPA ELV, CLV+ or Girocard or MTT ATB systems where additional data would be required from the standard request call.

For more detailed recommendation on the data requirement for specific products or integration types please get in touch with Computop team.

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## Paygate interface

### Definitions

#### Data formats

Format	Description
a	alphabetical
as	alphabetical with special characters
n	numeric
an	alphanumeric
ans	alphanumeric with special characters
ns	numeric with special characters

bool	boolean expression (true or false)
3	fixed length with 3 digits/characters
..3	variable length with maximum 3 digits/characters
enum	enumeration of allowed values
dtm	ISODateTime (YYYY-MM-DDThh:mm:ss)

## Abbreviations

Abbreviation	Description	Comment
CND	condition	
M	mandatory	If a parameter is mandatory, then it must be present
O	optional	If a parameter is optional, then it can be present, but it is not required
C	conditional	If a parameter is conditional, then there is a conditional rule which specifies whether it is mandatory or optional

**Notice:** Please note that the names of parameters can be returned in upper or lower case.

## General terminal requests

The parameters listed here generally apply to all requests from a terminal to the Paygate.

With the special payment method, you will find all parameters that apply to the respective payment method. Therefore, please note the description of the required payment method.

Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to make a payment with POS Payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageT ype	an2	M	Message type of request. Returned in response. For authorized values, see explanations in the appendix under Message Types.
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li>• <a href="#">HMAC Authentication (Request)</a></li> <li>• <a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTermi nalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufactu rer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalM odel	..60	O	Model or type of card reader
CCNr	n8.19	C	PAN of the card
CCBrand	an..22	M	Card brand or name of another payment method
EMVData	an..2048	C	Block for additional data. If there are no additional data, e.g. with MSR, then completely omit this parameter.
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
LocalDate	n4	C	The local month and day that the transaction takes place at the card acceptor location. The format is MMDD. Mandatory for SEPAELV, optional for others.
LocalTime	n6	C	The local time at which the transaction takes place at the point of card acceptor location. The format is hhmmss. Mandatory for SEPAELV, optional for others.
ReceiptNr	n4	C	Mandatory for SEPAELV, Girocard transactions, optional for others. The value which terminals send the following format for ELV in BMP 3 (according to ZVTH): 38bbbb (bbbb = receipt number)
ExtraCap abilities	an4	O	If a terminal supports additional skills such as Single Tap, each transaction must be marked with the appropriate terminal capability.  Additional terminal capabilities (Terminal Capabilities) <b>0001</b> : Single Tap capable
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

#### General parameters for terminal payments with POS Payment

The following table describes the result parameters with which the Computop Paygate responds to your system

**i** pls. be prepared to receive additional parameters at any time and do not check the order of parameters

**i** the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageT ype	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTermi nalID	an..20	M	TerminalID of the card reader
EMVData	an..2048	C	Block for additional data
ConfigUpd ate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

General response parameters for terminal payments with POS Payment

## Payments by credit card: reservation / booking

Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to make a POS payment with credit card, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):


Key	Format	CND	Description
Messa geType	an2	M	Message type of request. Returned in response. Allowed values: <b>01</b> for payment booking and <b>05</b> for reservation / authorization  When <code>OfflineSale=true</code> is passed with Message Type 01, the transaction is processed as an offline merchant risk sale (no online authorization). See <code>OfflineSale</code> parameter for details.  (Explanations in the appendix under Message Types)
Merch antID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amou nt	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Cashb ackAm ount	n..10	O	Cashback Amount in case such transaction type is submitted. Given in the smallest currency unit (e.g. EUR Cent).


Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li><a href="#">HMAC Authentication (Request)</a></li> <li><a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalModel	..60	O	Model or type of card reader
CCNr	n8.19	C	Mandatory if the credit card number is not passed in the DataEncrypted parameter
CCBrand	an..22	M	Card brand: VISA, MasterCard, Maestro, AMEX, DINERS, JCB, CUP. Please note the spelling! Always specify <b>SEPAELV</b> at ELV!
CCCVC	n4	O	Card check number: The last 3 digits on the credit card sub-type, at AMEX 4 digits.
CCExpiry	n6	M	Expiration date of credit card (YYYYMM), e.g. 202507
CCSeqNo	n3	O	Card sequence number
Track2	an..224	C	Mandatory with Magnetic Stripe Read (MSR). Data of the track2 for MSR or Track2EquivalentData (Tag 57) (in Hex formatting).
EMVData	an..2048	C	EMV data as required for the passing on to the acquirer (in hex formatting). The exact structure is defined by the protocol used, which is stored in the master files of the terminal. If there are no EMV data, such as MSR, then completely omit this parameter.
EntryMode	n3	M	POS entry mode
OfflineSale	bool	C	If set to "true", the transaction is processed as an offline/merchant risk sale. No online authorization takes place – the merchant bears the risk. Paygate creates a combined Sale (authorization + capture) and forwards it to the acquirer as a capture notification. Only valid with MessageType=01. Must not be used with MessageType=05 or any other message type. Currently supported only for credit card transactions via the NDS (Nexi Germany) acquirer connection. If the OfflineSale feature is not enabled for the given MerchantID, the request will be rejected. Any value other than "true" will be rejected – to process a standard online transaction, omit this parameter entirely.
PINData	an..128	C	Mandatory for online PIN. Encrypted PIN in ISO-0 format.
PINKSN	an..20	C	Mandatory for online PIN. DUKPT Key Serial Number of the PIN.
DataEncrypted	an..2048	O	PAN + Track2 equivalent data (in TLV format) as encrypted value. If this field is present, the CCNr parameter is not required.
DataKSN	an..20	C	KSN is generated by the terminal. Needed to decrypt the data from the DataEncrypted parameter.
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
ChDesc	an..25	O	Text shown on the customer's credit card statement next to the payee
LocalDate	n4	C	The local month and day that the transaction takes place at the card acceptor location. The format is MMDD. Mandatory for SEPAELV, optional for others.
LocalTime	n6	C	The local time at which the transaction takes place at the point of card acceptor location. The format is hhmmss. Mandatory for SEPAELV, optional for others.
ReceiptNr	n4	C	Mandatory for SEPAELV, Girocard transactions, optional for others. The value which terminals send the following format for ELV in BMP 3 (according to ZVTH): 38bbbb (bbbb = receipt number)
dccStatus	a1	C	Mandatory for DCC; status of foreign currency settlement. Possible values: <b>U</b> foreign currency was used. <b>E</b> foreign currency was offered but not used.
dccRateValue	ans13	C	Mandatory at DCC and dccStatus <b>U</b> ; Exchange rate with decimal point
baseAmount	n..10	C	Mandatory at DCC and dccStatus <b>U</b> ; Amount in the smallest currency unit in Terminal currency
baseCurrency	a3	C	Mandatory at DCC and dccStatus <b>U</b> ; Currency set up at the terminal as standard
dccMargin	ans..5	O	DCC margin/markup percentage

dccCommission	ans..12	O	DCC commission percentage
dccSource	ans..32	O	Exchange rate source (e.g., "REUTERS WHOLESALE INTERBANK")
dccTimestamp	ans..20	O	Timestamp of exchange rate
dccRequestID	an..32	O	Computop PayID of the DCC request (enables linking DCC and POS payment records)
ContractID	n..8	O	Additional contract number of the merchant with the acquirer, with which the default VU number can be overridden
AccountVerify	a..3	O	Allowed value: <b>yes</b> If this parameter is transmitted, an account verification (Zero Value Account Verification) is executed. In this case, the parameters amount and currency are optional. The amount can be zero.
RTF	an1	O	For recurring payments. Allowed values: I (initial payment of a new subscription) or E (agreement that COF is used for further payments).
PACFormat	n2	O	Defines the ISO PIN format present in PINData parameter. Valid values:  10: ISO-0  11: ISO-1  14: ISO-4  If this value is not set than ISO-0 is taken as the default one.
ExtraCapabilities	an4	O	If a terminal supports additional skills such as Single Tap, each transaction must be marked with the appropriate terminal capability.  Additional terminal capabilities (Terminal Capabilities) <b>0001</b> : Single Tap capable
DuplicateATC	a3	C	Mandatory if the same ATC is used for a second request during a payment process. This procedure is described for the single-tap process. As a rule, any further request with the same ATC is rejected by the acquirer or issuer. However, the single-tap process intended to repeat the ATC and must therefore be marked with this parameter.  <b>yes</b> : The same ATC was sent intended
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.
dccRateID	ans..20	O	Fiserv IPG-Rate. Only required in case of a DCC service via Fiserv.
TraceNr	an..6	C	A number assigned by a terminal to identify uniquely a transaction. Mandatory for SEPAELV and girocard transactions, optional for others.
ConditionCode	an..2	C	Additional information for transaction, to be communicated with CLV+ end. Mandatory for SEPAELV and girocard transactions, optional for others.

#### Parameters for POS payments with credit card

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageT ype	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTermi nalID	an..20	M	TerminalID of the card reader
CodeExt	an2	M	Response code of the acquirer
ApprovalC ode	n..6	C	Approval code of the acquirer (also known as the authCode or authorization . called Response). Configured at the merchant.
EMVData	an..2048	C	Acquirer Response (in hex formatting). Includes, among other things, the Issuer Authorization Response Code (Tag 8A), the Issuer Scripts (Tag 71, 72) and Issuer Authentication Data (Tag 91).
VUNr	ans..20	O	Contract number of the merchant with the acquirer. Configured at the merchant.
TerminalID	ans..20	O	TerminalID, which Computop exchanges with the acquirer. Configured at the merchant.
AQ	ans..30	O	Abbreviation of the acquirers. Configured at the merchant.
TrxTime	ans21	O	Time of execution of the transaction in format: dd.MM.yyyy HH:mm:ssff. Configured at the merchant.
Additional Response Data	ans..99	O	Additional Response Data (at GICC BMP 44), which the acquirer sends in the response. Configured at the merchant.
PCNr	n..16	O	Pseudo card number: Paygate generated random number, which represents a real credit card number. The pseudocard number (PKN) starts with 0, and the last 3 digits correspond to those of the real card number. PKN can be used as a real card number for authorization, booking and credits.
Transactio nID	an..56	C	Value returned in response to an initial recurring payment (RTF-I or E)
ConfigUpd ate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
Last4Card holderPAN	n..4	O	MTT only: The last 4 digits of the printed PAN at VISA if the tokenized DPAN was used in the request
PAR	ans..999	O	Only MTT: Payment Account Reference, which VISA/MasterCard makes available to the merchant to identify a customer in their back office system
Embossed PANPCNr	n..19	O	MTT and MasterCard/Maestro only: Another Pseudo Card Number (s. Parameter PCNr), which refers to the printed PAN of the physical card. Included in the Acquirer response if a tokenized PAN was used in the request.
Embossed PANExpiry Date	n..4	O	MTT and MasterCard/Maestro only: The expiration date belonging to the Embossed PAN parameter, which is included in the Acquirer response. Format: YYMM.
OriginalCo de	ans..3	O	MTT only: Contains the original Response Code (OmniPay BM 60 SF68: Scheme Response Code) from the authorization platforms for payment systems
schemeRef erenceID	ans..64	O	MTT only: Cardmark-specific transaction ID required for subsequent card on file payments, delayed authorizations and resubmission.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for POS payments with credit card

## Booking notification (Capture)

Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to capture a POS payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
Message Type	an2	M	Message type of request. Returned in response. Allowed values: <b>0B</b> for Booking Notification (Explanations in the appendix under Message Types)
<a href="#">Merchant ID</a>	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
<a href="#">PayID</a>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
<a href="#">TransID</a>	ans..64	M	TransactionID provided by you which should be unique for each payment
<a href="#">refnr</a>	ans..30	O	Merchant's unique reference number
<a href="#">Amount</a>	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
<a href="#">Currency</a>	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
<a href="#">MAC</a>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"><li>• <a href="#">HMAC Authentication (Request)</a></li><li>• <a href="#">HMAC Authentication (Notify)</a></li></ul>
POSTerminalID	an...20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
Terminal Model	..60	O	Model or type of card reader
LocalDate	n4	M	The local month and day that the transaction takes place at the card acceptor location. The format is MMDD. Mandatory for SEPAELV, optional for others.
LocalTime	n6	M	The local time at which the transaction takes place at the point of card acceptor location. The format is hhmmss. Mandatory for SEPAELV, optional for others.
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Parameters for captures of POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
<a href="#">mid</a>	ans..30	M	MerchantID, assigned by Computop
<a href="#">PayID</a>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
<a href="#">XID</a>	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate

TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTerminalID	an...20	M	TerminalID of the card reader
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the posconfig.aspx.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Key	Format	CND	Description
mid	ans..30	M	MerchantID, assigned by Computop

Key	Format	CND	Description
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.

Key	Format	CND	Description
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate

Key	Format	CND	Description
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment

Key	Format	CND	Description
refnr	ans..30	O	Merchant's unique reference number

Key	Format	CND	Description
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )

Key	Format	CND	Description
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!

Key	Format	CND	Description
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )

Key	Format	CND	Description
POSTerminalID	an...20	M	TerminalID of the card reader
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the posconfig.aspx.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for captures of POS payments

## Payments as SEPA-ELV

For parameters see section *Credit card payment*.

Important: The parameter CCBBrand must be assigned the value **SEPAELV**.

## Payments by girocard

Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to make a POS payment with girocard, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Allowed values: <b>01</b> for authorization and automated booking (Explanations in the appendix under Message Types)
Process Mode	an2	M	Possible values: <b>00</b> : Offline <b>01</b> : Online <b>0E</b> : Emergency Offline (terminal is not connected to accept server) <b>EC</b> : Emergency in EC network operation
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"><li><a href="#">HMAC Authentication (Request)</a></li><li><a href="#">HMAC Authentication (Notify)</a></li></ul>
POSTerminalID	an...20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalModel	..60	O	Model or type of card reader
CCNr	n8.19	M	PAN of the girocard
CCBrand	an...22	M	Fixed value: <b>girocard</b>
CCExpiry	n6	M	Expiration date of girocard (YYYYMM), e.g. 202507
CCSeqNr	n3	O	Card sequence number
Track2	an..224	M	Obligation to authorise or emergency operation. Data of the track2 for MSR or Track2EquivalentData (Tag 57) (in Hex formatting).
EMVData	an..2048	C	EMC data as required for the continuation to the headend (in hex formatting). The exact structure is defined by the protocol used, which is stored in the master files of the terminal. If there are no EMC data, such as MSR, then completely omit this parameter.

EntryMode	n3	M	POS entry mode
PINData	an..128	C	Mandatory for online PIN. Encrypted PIN in ISO-1 format.
PINKSN	an..20	C	Mandatory for online PIN. DUKPT Key Serial Number of the PIN.
OrderDescription	ans..200	O	Description of purchased goods, unit prices etc.
LocalDate	n4	M	Date of the transaction. Format: MMTT
LocalTime	n6	M	Time of the transaction. Format: hhmmss
ReceiptNr	n4	M	Number for the document. Will be continuously increased. Overflow to 9999.
TerminalData	an...99	M	Terminal data includes: online time, POS data and approval number of the terminal. Format: Hex, TLV-coded (see also TA BMP 61).
ConditionCode	n2	C	Condition code. Values from 00 to 99 as described in TA under BMP 25.
TraceNr	n6	M	Continuous 6-digit decimal. Is incremented for each transaction as described in TA.
PACFormat	n2	O	Defines the PIN ISO format used. 10: ISO-0 11: ISO-1 At girocard, the PIN ISO 1 format is allowed.
ExtraCapabilities	an4	O	If a terminal supports additional skills such as Single Tap, each transaction must be marked with the appropriate terminal capability. Additional terminal capabilities (Terminal Capabilities) <b>0001</b> : Single Tap capable
DMACKSN	an...20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Key	Format	CND	Description
<a href="#">MerchantID</a>	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.

Key	Format	CND	Description
<a href="#">TransID</a>	ans..64	M	TransactionID provided by you which should be unique for each payment

Key	Format	CND	Description
<a href="#">refnr</a>	ans..30	O	Merchant's unique reference number

Key	Format	CND	Description
<a href="#">Amount</a>	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit). For DCC: Amount in foreign currency For Cashback transactions this should contain the sum of payment amount and cashback amount.

Key	Format	CND	Description
<a href="#">Currency</a>	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>


Key	Format	CND	Description
<a href="#">MAC</a>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li><a href="#">HMAC Authentication (Request)</a></li> <li><a href="#">HMAC Authentication (Notify)</a></li> </ul>


Key	Format	CND	Description
<a href="#">POSTerminalID</a>	an..20	M	TerminalID of the card reader
<a href="#">Device</a>	an16	M	Serial number of the card reader

Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
Terminal Model	..60	O	Model or type of card reader
CCNr	n8.19	M	PAN of the girocard
CCBrand	an...22	M	Fixed value: <b>girocard</b>
CCEpiry	n6	M	Expiration date of girocard (YYYYMM), e.g. 202507
CCSeqNr	n3	O	Card sequence number
Track2	an..224	M	Obligation to authorise or emergency operation. Data of the track2 for MSR or Track2EquivalentData (Tag 57) (in Hex formatting).
EMVData	an..2048	C	EMV data as required for the continuation to the headend (in hex formatting). The exact structure is defined by the protocol used, which is stored in the master files of the terminal. If there are no EMV data, such as MSR, then completely omit this parameter.
EntryMode	n3	M	POS entry mode
PINData	an..128	C	Mandatory for online PIN. Encrypted PIN in ISO-1 format.
PINKSN	an..20	C	Mandatory for online PIN. DUKPT Key Serial Number of the PIN.
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
LocalDate	n4	M	Date of the transaction. Format: MMTT
LocalTime	n6	M	Time of the transaction. Format: hhhmss
ReceiptNr	n4	M	Number for the document. Will be continuously increased. Overflow to 9999.
Terminal Data	an...99	M	Terminal data includes: online time, POS data and approval number of the terminal. Format: Hex, TLV-coded (see also TA BMP 61).
Condition Code	n2	C	Condition code. Values from 00 to 99 as described in TA under BMP 25.
TraceNr	n6	M	Continuous 6-digit decimal. Is incremented for each transaction as described in TA.
PACFormat	n2	O	Defines the PIN ISO format used. 10: ISO-0 11: ISO-1  At girocard, the PIN ISO 1 format is allowed.
ExtraCapabilities	an4	O	If a terminal supports additional skills such as Single Tap, each transaction must be marked with the appropriate terminal capability.  Additional terminal capabilities (Terminal Capabilities) <b>0001</b> : Single Tap capable
DMACKSN	an...20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

#### Parameters for POS payments with girocard

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
Message Type	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTerminalID	an...20	M	TerminalID of the card reader
CodeExt	an2	M	Response code of the acquirer
Approval Code	n..6	C	Approval code from the acquirer (also known as AuthCode or Authorisation ID. called Response). Configured at the merchant.

EMVData	an..2048	C	Response headroom (in hex formatting). Includes, among other things, the Issuer Authorization Response Code (Tag 8A), the Issuer Scripts (Tag 71, 72) and Issuer Authentication Data (Tag 91)
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the posconfig.aspx.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Key	Format	CND	Description
mid	ans..30	M	MerchantID, assigned by Computop

Key	Format	CND	Description
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.

Key	Format	CND	Description
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate

Key	Format	CND	Description
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment

Key	Format	CND	Description
refnr	ans..30	O	Merchant's unique reference number

Key	Format	CND	Description
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )

Key	Format	CND	Description
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!

Key	Format	CND	Description
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )

Key	Format	CND	Description
POSTerminalID	an..20	M	TerminalID of the card reader
CodeExt	an2	M	Response code of the acquirer
ApprovalCode	n..6	C	Approval code from the acquirer (also known as AuthCode or Authorisation ID. called Response). Configured at the merchant.
EMVData	an..2048	C	Response headroom (in hex formatting). Includes, among other things, the Issuer Authorization Response Code (Tag 8A), the Issuer Scripts (Tag 71, 72) and Issuer Authentication Data (Tag 91)
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the posconfig.aspx.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for POS payments with girocard

## Payments with Alipay / Wechat

Payments can be made at the terminal via Alipay and Wechat. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to make a POS payment with Alipay or Wechat, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
Message Type	an2	M	Message type of request. Returned in response. Allowed values: <b>01</b> (Explanations in the appendix under Message Types)
Merchant ID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
Terminal Model	..60	O	Model or type of card reader
CCNr	n8.19	M	Not required for Alipay / Wechat. Please pass <b>0000000000000000</b> (16 x 0), because mandatory.
CCBrand	an..22	M	At Alipay please always include, at Wechat always show <b>Wechat!</b>
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
ContractID	n..8	O	Additional contract number of the merchant with the acquirer, with which the default VU number can be overridden
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Parameters for POS payments with Alipay or Wechat

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
Message Type	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
POSTerminalID	an..20	M	TerminalID of the card reader
Status	a..50	M	AUTHORIZE-REQUEST or FAILED
Description	ans..1024	M	PENDING, because the approval of Alipay / Wechat is still waiting. Further description if the payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	n8	M	If a valid QR code can be submitted, then 21190985 or 23030985 for PENDING otherwise error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
EMVData	an..2048	C	Value for the QR code in JSON format additionally base64-viren. Examples: a) Alipay ew0KCSJxCNvZSPiOiAHR0cHM6Ly9xcj5hbGluYXkuY29tL28JheDAwMTNo25tbW5XNiMDBiNiINCn0 b) Wechat eyJxCMNvZGUiOiJ3Zi4w46Ly93eHHeS9iaXpwYX11cmw/cHI9U0pwclkwWSJ9 base64-decoded: a) Å "qrcode":"https://qr.alipay.com/bax009917nmmndisb00e6", "tradeÃ3no:"1234567890123456" b) Å "qrcode":"weixin://wxpay/bizpayurl?pr-SJprY0Y"
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <code>posconfig.aspx</code> .
VUNr	ans..20	M	PartnerID of the merchant
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for POS payments with Alipay or Wechat

## Status checking by the terminal

Repeatedly calling the `pospayment.aspx` (Polling, MessageType F1) determines whether the operation has been approved in Alipay / Wechat. For this purpose, it is necessary to check whether the response parameter `LastStatus` has assumed the value OK or FAILED. The process is considered successfully approved if `LastStatus` displays the value OK and the `AmountAuth` parameter the payment amount. The process is considered rejected when `LastStatus` returns the value FAILED. As long as Alipay / Wechat has not approved the process, `LastStatus` contains the value AUTHORIZE-REQUEST.

The parameters from the Inquire section apply to call the status check.

## Instalment purchase with easyCredit

Performing an instalment purchase transaction with a terminal. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to make a POS payment with easyCredit, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
Message Type	an2	M	Message type of request. Returned in response. Allowed values: <b>01</b> (Explanations in the appendix under Message Types)
Merchant ID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li>• <a href="#">HMAC Authentication (Request)</a></li> <li>• <a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
Terminal Model	..60	O	Model or type of card reader
CCNr	n8.19	M	PAN of the card. With easyCredit the PAN consisting of country prefix, short bank code, account number and check digit.
CCBrand	an..22	M	Please always include <b>easyCredit</b> with easyCredit!
CCEpiry	n6	C	Mandatory for credit cards. Expiration date of credit card (YYDMM), e.g. 202507.
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
ContractID	n..8	O	Additional contract number of the merchant with the acquirer, with which the default VU number can be overridden
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Parameters for POS payments with easyCredit

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description	Beschreibung
MessageType	an2	M	Message type transmitted in the request	
mid	ans..30	M	MerchantID, assigned by Computop	
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.	
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate	
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment	
refnr	ans..30	O	Merchant's unique reference number	
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )	
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!	
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )	
POST TerminalID	an...20	M	TerminalID of the card reader	TerminalID des Kartenlesers
CodeExit	an2	M	Response code from easyCredit <b>posData.status code</b>	Antwortcode von easyCredit <b>posData.status code</b>
ApprovalCode	n..6	C	With easyCredit the approval number	Bei easyCredit die Genehmigungsnummer
EMVData	an..2048	C	With easyCredit all elements from the JSON object <b>posData</b> . This contains the attributes for the document print. Format: JSON (packaged in base64).	Bei easyCredit alle Elemente aus dem JSON-Objekt <b>posData</b> . Dies enthält die Attribute für den Belegdruck. Format: JSON (verpackt in Base64).
VUNr	ans..20	O	With easyCredit the sales office number of the store	Bei easyCredit die Verkaufsstellennummer des Geschäfts
Config Update	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .	Wenn dieser Parameter in der Antwort vorkommt und den Wert "yes" hat, dann liegt ein Update der Terminalkonfiguration vor. Das Update kann dann über die <a href="#">posconfig.aspx</a> abgerufen werden.
DMAC KSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)	DUKPT-Schlüsselseriennummer, die zum Generieren des DUKPT-MAC (Parameter DMAC) verwendet wird
DMAC	an16	M	DUKPT Message Authentication Code for the entire response	DUKPT-Nachrichtenauthentifizierungscode für die gesamte Antwort

Response parameters for POS payments with easyCredit

## Inquire

With the help of the Inquire Request, you will receive information about a transaction from which you only know your own TransID. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to inquire information about a POS payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
Message Type	an2	M	Message type of request. Returned in response. Allowed values in the attachment under Message Types. Here always: <b>F1</b> (Explanations in the appendix under Message Types)
Merchant ID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li>• <a href="#">HMAC Authentication (Request)</a></li> <li>• <a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	C	Manufacturer of the card reader (associated with the serial number) Mandatory for SEPAELV and Girocard, optional for others.
Terminal Model	..60	O	Model or type of card reader
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Parameters for inquiring information about POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
TransID	ans..64	C	Transaction number of the merchant. In the event of an error, not included in the answer.
Status	a..50	M	OK or FAILED. Refers to the Inquire request itself.
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTerminalID	an...20	M	TerminalID of the card reader
AmountAuth	n..10	O	Authorized amount of the requested operation
AmountCap	n..10	O	Captured amount of the requested process
AmountCred	n..10	O	Credited amount of the requested process
LastStatus	n..10	O	Status of the requested process
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for inquiring information about POS payments

## Card Reversal / Automatic Reversal

Reversal initiated by the map or triggered automatically by the terminal after a timeout. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to automatically reverse a POS payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageT ype	an2	M	Message type of request. Returned in response. Allowed value: <b>F0</b> (Explanations in the appendix under Message Types)
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Cashback Amount	n..10	O	Cashback Amount in case such transaction type is submitted. Given in the smallest currency unit (e.g. EUR Cent).
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li><a href="#">HMAC Authentication (Request)</a></li> <li><a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTermi nalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufactu rer	an..30	C	Manufacturer of the card reader (associated with the serial number)  Mandatory for SEPAELV and Girocard, optional for others.
TerminalM odel	..60	O	Model or type of card reader
EMVData	an..2048	C	Data of the original transaction incl. AAC at Card Reversal (in Hex formatting). If there are no EMC data, such as MSR, then completely omit this parameter.
CCSeqNo	n3	O	Card sequence number
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
LocalDate	n4	C	The local month and day that the transaction takes place at the card acceptor location. The format is MMDD. Mandatory for SEPAELV, optional for others.
LocalTime	n6	C	The local time at which the transaction takes place at the point of card acceptor location. The format is hhmmss. Mandatory for SEPAELV, optional for others.
ReceiptNr	n4	C	Mandatory for SEPAELV, Girocard transactions, optional for others. The value which terminals send the following format for ELV in BMP 3 (according to ZVTH): 38bbbb (bbbb = receipt number)
dccStatus	a1	C	Mandatory for DCC; status of foreign currency settlement. Possible values: <b>U</b> foreign currency was used. <b>E</b> foreign currency was offered but not used.
TraceNr	n6	O	Continuous 6-digit decimal. Is incremented for each transaction as described in TA.
ConditionC ode	n2	C	<b>Mandatory only for girocard.</b> Condition code. Values from 00 to 99 as described in TA under BMP 25.
TerminalD ata	an..99	C	<b>Mandatory only for girocard.</b> Terminal data includes: online time, POS data and approval number of the terminal. Format: Hex, TLV-coded (see also TA BMP 61).
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

#### Parameters for reversals of POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
CodeExt	an2	M	Response code of the acquirer
EMVData	an..2048	C	Acquirer Response (in hex formatting). Includes, among other things, the Issuer Authorization Response Code (Tag 8A), the Issuer Scripts (Tag 71, 72) and Issuer Authentication Data (Tag 91)
POSTerminalID	an...20	M	TerminalID of the card reader
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
VUNr	ans..20	O	Only by credit card: contract number of the merchant with the acquirer. Configured at the merchant.
TerminalID	ans..20	O	Only with credit card: TerminalID that Computop exchanges with the acquirer. Configured at the merchant.
AQ	ans..30	O	Abbreviation of the Acquirers. Configured at the merchant.
TrxTime	ans21	O	Time of execution of the transaction in format: dd.MM.yyyy HH:mm:ssff. Configured at the merchant.
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for reversals of POS payments

## Manual Reversal

This reversal is triggered by the terminal operator. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to reverse a POS payment manually, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageT ype	an2	M	Message type of request. Returned in response. Allowed value: <b>02</b> (Explanations in the appendix under Message Types)
<a href="#">MerchantID</a>	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
<a href="#">PayID</a>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
<a href="#">TransID</a>	ans..64	M	TransactionID provided by you which should be unique for each payment
<a href="#">refnr</a>	ans..30	O	Merchant's unique reference number
<a href="#">Amount</a>	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Cashback Amount	n..10	O	Cashback Amount in case such transaction type is submitted. Given in the smallest currency unit (e.g. EUR Cent).
<a href="#">Currency</a>	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
<a href="#">MAC</a>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"><li><a href="#">HMAC Authentication (Request)</a></li><li><a href="#">HMAC Authentication (Notify)</a></li></ul>
POSTermi nalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufactu rer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalM odel	..60	O	Model or type of card reader
LocalDate	n4	M	Date of the transaction. Format: MMTT
LocalTime	n6	M	Time of the transaction. Format: hhmmss
ReceiptNr	n4	M	Number for the document. Will be continuously increased. Overflow to 9999.
TraceNr	n6	M	Continuous 6-digit decimal. Is incremented for each transaction as described in TA.
ConditionC ode	n2	C	Additional information for transaction, to be communicated with CLV+ end. Mandatory for SEPAELV and girocard transactions, optional for others.  Values from 00 to 99 as described in TA under BMP 25.
TerminalID ata	an..99	C	<b>Mandatory only for girocard.</b> Terminal data includes: online time, POS data and approval number of the terminal. Format: Hex, TLV-coded (see also TA BMP 61).
CCExpiry	n6	C	Mandatory for credit cards. Expiry date of the card (YYYYMM), e.g. 202507. Must be sent for SEPAELV transactions.
CCSeqNr	n3	O	Card sequence number. Must be sent for SEPAELV transactions.
EntryMode	n3	C	Mandatory for credit cards. POS Entry Mode (Tag 9F39). Must be sent for SEPAELV transactions.
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

Parameters for manual reversals of POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageT ype	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
CodeExt	an2	O	Response code of the acquirer
POSTermi nalID	an...20	M	TerminalID of the card reader
VUNr	ans..20	O	Only by credit card: contract number of the merchant with the acquirer. Configured at the merchant.
TerminalID	ans..20	O	Only with credit card: TerminalID that Computop exchanges with the acquirer. Configured at the merchant.
AQ	ans..30	O	Abbreviation of the Acquirers. Configured at the merchant.
TrxTime	ans21	O	Time of execution of the transaction in format: dd.MM.yyyy HH:mm:ssff. Configured at the merchant.
ConfigUpd ate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
OriginalCo de	ans..3	O	MTT only: Contains the original Response Code (OmniPay BM 60 SF68: Scheme Response Code) from the authorization platforms for payment systems
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for manual reversals of POS payments

## Credit without reference

Triggering a credit via the terminal. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to credit a POS payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
Message Type	an2	M	Message type of request. Returned in response. Allowed value: <b>03</b> (Explanations in the appendix under Message Types)
Merchant ID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li>• <a href="#">HMAC Authentication (Request)</a></li> <li>• <a href="#">HMAC Authentication (Notify)</a></li> </ul>
RefNr	ans..30	O	Unique reference number. For DCC: dccReferenceData (reference of the DCC request).
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three characters DIN / ISO 4217. At DCC: The foreign currency.
dccStatus	a1	C	Mandatory for DCC; status of foreign currency settlement. Possible values: <b>U</b> foreign currency was used. <b>E</b> foreign currency was offered but not used.
dccRateValue	ans13	C	Mandatory at DCC and dccStatus <b>U</b> ; Exchange rate with decimal point
dccRateID	ans..20	C	Fiserv IPG-Rate. Only present in case of a DCC service via Fiserv.
baseAmount	n..10	C	Mandatory at DCC and dccStatus <b>U</b> ; Amount in the smallest currency unit in Terminal currency
baseCurrency	a3	C	Mandatory at DCC and dccStatus <b>U</b> ; Currency set up at the terminal as standard
dccMargin	ans..5	O	DCC margin/markup percentage
dccCommission	ans..12	O	DCC commission percentage
dccSource	ans..32	O	Exchange rate source (e.g., "REUTERS WHOLESALE INTERBANK")
dccTimestamp	ans..20	O	Timestamp of exchange rate
dccRequestID	an..32	O	Computop PayID of the DCC request (enables linking DCC and POS payment records)
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	C	Manufacturer of the card reader (associated with the serial number)  Mandatory for SEPAELV and Girocard, optional for others.
Terminal Model	..60	O	Model or type of card reader
CCNr	n8..19	M	Card number
CCBrand	an..22	M	Card brand: VISA, MasterCard, Maestro, AMEX, DINERS, JCB, CUP. Please note the spelling! Always specify <b>SEPAELV</b> at ELV!
CCEpiry	n6	M	Expiration date of the card (YYYYMM), e.g. 202507
CCSeqNr	n3	O	Card sequence number
Track2	an..224	C	Data of the track2 for MSR or Track2EquivalentData (Tag 57) (in Hex formatting). At MSR Track2 or Track2Enc is mandatory.
DataEncrypted	an..2048	O	Pan + Track2 Equivalent Data (in TLV format) as an encrypted value. If this field is present, the parameter CCNr is not required. PKSC#7 padding is recommended for the TLV string.
DataKSN	an..20	C	KSN is generated by the terminal. Is required to decrypt the data from the parameter DataEncrypted.
EntryMode	n3	C	Mandatory for credit cards. POS Entry Mode.
OrderDesc	ans..200	O	Description of purchased goods, unit prices etc.
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

## Parameters for credits of POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

**i** pls. be prepared to receive additional parameters at any time and do not check the order of parameters

**i** the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTerminalID	an..20	M	TerminalID of the card reader
CodeExt	an2	M	Response code of the acquirer
VUNr	ans..20	O	Only at credit card. Contract number of the merchant with the acquirer. Configured at the merchant.
TerminalID	ans..20	O	Only at credit card. TerminalID, which Computop exchanges with the acquirer. Configured at the merchant.
AQ	ans..30	O	Abbreviation of the acquirers. Configured at the merchant.
TrxTime	ans21	O	Time of execution of the transaction in format: dd.MM.yyyy HH:mm:ssff. Configured at the merchant.
ConfigUpdate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAP)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

## Response parameters for credits of POS payments

## POS Increment

Not yet available for all acquirers. Some parameters are valid only for requests from certain areas: DCC: Dynamic Currency Conversion, MTT: Mass Transit Transaction.

In order to increment a POS payment, please use the following URL:

<https://www.computop-paygate.com/posPayment.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posPayment.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Allowed value: <b>06</b> (Explanations in the appendix under Message Types)
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: <ul style="list-style-type: none"> <li>• <a href="#">HMAC Authentication (Request)</a></li> <li>• <a href="#">HMAC Authentication (Notify)</a></li> </ul>
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalModel	..60	O	Model or type of card reader
CCSeqNr	n3	O	Card sequence number
Track2	an..224	C	Mandatory with Magnetic Stripe Read (MSR). Data of the track2 for MSR or Track2EquivalentData (Tag 57) (in Hex formatting).
EMVData	an..2048	C	EMC data as required for the passing on to the acquirer (in hex formatting). The exact structure is defined by the protocol used, which is stored in the master files of the terminal. If there are no EMC data, such as MSR, then completely omit this parameter.
EntryMode	n3	M	POS Entry Mode
DataEncrypted	an..2048	O	PAN + Track2 Equivalent Data (in TLV format) as encrypted value. If this field is present, the CCNr parameter is not required.
DataKSN	an..20	C	KSN is generated by the terminal. Is required to decrypt the data from the parameter DataEncrypted.
LocalDate	n4	M	Date of the transaction. Format: MMTT
LocalTime	n6	M	Time of the transaction. Format: hhmmss
ReceiptNr	n4	M	Number for the document. Will be continuously increased. Overflow to 9999.
DMACKSN	an..20	C	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC). Mandatory for all devices except PhonePOS.
DMAC	an16	C	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ". Mandatory for all devices except PhonePOS.

#### Parameters for increments of POS payments

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageT ype	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
CodeExt	an2	O	Response code of the acquirer
POSTermi nalID	an...20	M	TerminalID of the card reader
OriginalCo de	ans..3	O	MTT only: Contains the original Response Code (OmniPay BM 60 SF68: Scheme Response Code) from the authorization platforms for payment systems
VUNr	ans..20	O	Contract number of the merchant with the acquirer. Configured at the merchant.
TerminalID	ans..20	O	TerminalID that Computop exchanges with the acquirer. Configured at the merchant.
AQ	ans..30	O	Abbreviation of the Acquirers. Configured at the merchant.
TrxTime	ans21	O	Time of execution of the transaction in format: dd.MM.yyyy HH:mm:ssff. Configured at the merchant.
EMVData	an..2048	C	Block for additional data
ConfigUpd ate	a3	O	If this parameter occurs in the response and has the value "yes", then there is an update of the terminal configuration. The update can then be retrieved via the <a href="#">posconfig.aspx</a> .
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for increments of POS payments

## DCC transactions via VPN

In order to make a DCC request, please use the following URL:

<https://www.computop-paygate.com/posdcc.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posdcc.aspx>.



**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Allowed value: <b>FC</b> (Explanations in the appendix under Message Types)
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the <a href="#">Computop Helpdesk</a> , if you want to capture amounts <100 (smallest currency unit).  For DCC: Amount in foreign currency  For Cashback transactions this should contain the sum of payment amount and cashback amount.
Currency	a3	M	Currency, three letters DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: <a href="#">A1 Currency table</a>
POSTerminalID	an...20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
CCBIN	n10	M	The first 10 digits of the card number
CCEpiry	n6	M	Expiration date of credit card (YYDDMM), e.g. 202507
CCBrand	a..22	M	Card brand
ContractID	n..8	O	Additional contract number of the merchant

#### Parameters for DCC requests

The following table describes the result parameters with which the Computop Paygate responds to your system

-  pls. be prepared to receive additional parameters at any time and do not check the order of parameters
-  the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
refnr	ans..30	O	Merchant's unique reference number
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
POSTerminalID	an...20	M	TerminalID of the card reader
CodeExt	n..10	O	The status of the DCC request if the merchant is activated and inquiry fails
ErrorText	an..256	O	Error text when registered at the merchant fails
dccRateID	ans..20	O	Fiserv IPG-Rate. Only present in case of a DCC service via Fiserv.
<b>Following parameters are returned only if there is a successful query</b>			
dccRateValue	ans..13	C	Exchange rate with decimal separator
dccForeignCurrencyCode	a3	C	Foreign currency, three characters DIN / ISO 4217
expirationTime	ans..19	C	Time stamp indicating how long exchange rate is valid. Specification in UTC. Format: YYYY-MM-ddTHH:mm:ss
dccForeignAmount	n..10	C	Foreign currency amount in the smallest currency unit
dccMargin	ans..5	C	Exchange rate fee in percent.  This value is the markup applied to foreign exchange rate for the transaction. This markup is also referred to as the rate margin which corresponds to the margin that is applied to the wholesale foreign exchange rate used in the DCC transaction. The rate margin is supplied for receipt printing purposes and to meet regulatory requirements where applicable. Examples 3 3.4 3,75
dccCommission	ans7	C	Reserved, Fixed "00.0000" - dd.dddd
dccSource	ans...32	C	Exchange rate provider: "REUTERS WHOLESALE INTERBANK"
dccTimeStamp	ans19	C	Time stamp when the shift course was requested. Specification in UTC. Format: YYYY-MM-ddTHH:mm:ss

Response parameters for DCC requests

## Terminal configuration

Retrieve the terminal configuration data from the Paygate.

In order to retrieve the POS terminal configuration data, please use the following URL:

<https://www.computop-paygate.com/posConfig.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posConfig.aspx>.


**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.


The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Here always: <b>F2</b> (Explanations in the appendix under Message Types)
<a href="#">MerchantID</a>	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalModel	..60	O	Model or type of card reader
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC).
DMAC	an16	M	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ".

Parameters for retrieving POS terminal configuration data

The following table describes the result parameters with which the Computop Paygate responds to your system

 pls. be prepared to receive additional parameters at any time and do not check the order of parameters

 the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
<a href="#">mid</a>	ans..30	M	MerchantID, assigned by Computop
<a href="#">Status</a>	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
<a href="#">Description</a>	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
<a href="#">Code</a>	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
ConfigData	ans..8192	M	Configuration data in the agreed format
POSTerminalID	an...20	M	TerminalID of the card reader
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for retrieving POS terminal configuration data

## Terminal configuration v2 (Special interface with no Merchant ID in request)

Retrieve the terminal configuration data from the Paygate.

In order to retrieve the POS terminal configuration data, please use the following URL:

<https://www.computop-paygate.com/posConfigExt.aspx>

For the Integration test system, please use: <https://dev.computop.de/Paygate/posConfigExt.aspx>.

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Here always: <b>F2</b> (Explanations in the appendix under Message Types)
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
Manufacturer	an..30	M	Manufacturer of the card reader (associated with the serial number)
TerminalModel	..60	O	Model or type of card reader
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC).
DMAC	an16	M	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ".

Parameters for retrieving POS terminal configuration data

The following table describes the result parameters with which the Computop Paygate responds to your system

**i** pls. be prepared to receive additional parameters at any time and do not check the order of parameters

**i** the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> )
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <a href="#">Code</a> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
ConfigData	ans..8192	M	Configuration data in the agreed format
POSTerminalID	an..20	M	TerminalID of the card reader
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC)
DMAC	an16	M	DUKPT Message Authentication Code for the entire response

Response parameters for retrieving POS terminal configuration data

## Payment facilitator

To use the functionality of the Payment Facilitator, you need to add the following parameters to your request.

The following table describes the request parameters:

Key	Format	CND	Description
subMID	ans..15	C	SubMerchantID, which is assigned by the Payment Facilitator and transmitted in the call to identify submerchants in the transaction process.
subMIDName	ans..22	C	Name of the SubMerchantID
subMIDAddrCity	ans..13	C	City of SubMerchantID
subMIDAddrCountryCode	a2	C	Country code of the SubMerchantID in the format ISO-3166-1, alphanumerical 2-digit
subMIDAddrStreet	ans..38	C	Road of SubMerchantID
subMIDAddrZip	ans..10	C	Postal code of SubMerchantID
subMIDAddrState	ans3	C	Federal state of SubMerchantID

Additional parameters for using the Payment Facilitator

# CUT-OFF

**Notice:** For security reasons, Computop Paygate rejects all payment requests with formatting errors. Therefore, please use the correct data type for each parameter.

The following table describes the [encrypted payment request parameters](#):

Key	Format	CND	Description
MessageType	an2	M	Message type of request. Returned in response. Allowed value: <b>CF</b> (Explanations in the appendix under Message Types)
<a href="#">MerchantID</a>	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
<a href="#">TransID</a>	ans..64	M	TransactionID provided by you which should be unique for each payment
POSTerminalID	an..20	M	TerminalID of the card reader
Device	an16	M	Serial number of the card reader
cutoff	JSON	O	Base64 encoded JSON object
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC).
DMAC	an16	M	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ".

Parameters for Cut-Off

Example value of parameter: cutoff

```

    {
      "receiptNr": {
        "from": <receiptNrFrom>,
        "to": <receiptNrTo>
      },
      "numberOfTx": [
        {
          "brand": "VISA",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "MastereCard",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "Maestro",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "AMEX",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "DINERS",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "Discover",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "JCB",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "CUP",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "GIROCARD",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        },
        {
          "brand": "SEPAELV",
          "numberOfTx": <numberOfTx>,
          "checkSum": <checkSum>
        }
      ]
    }
  }

```

The following table describes the result parameters with which the Computop Paygate responds to your system

- i** pls. be prepared to receive additional parameters at any time and do not check the order of parameters
- i** the key (e.g. mid, RefNr) should not be checked case-sensitive

Key	Format	CND	Description
MessageType	an2	M	Message type transmitted in the request
mid	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.
TransID	ans..64	C	Only on success: Merchant's transaction number.
POSTerminalID	an..20	M	TerminalID of the card reader
Status	a..50	M	OK ( <a href="#">URLSuccess</a> ) or FAILED ( <a href="#">URLFailure</a> ). Refers to the inquire request itself.
Description	ans..1024	M	Further details in the event that payment is rejected. Please <b>do not</b> use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
Code	an8	M	Error code according to Paygate Response Codes ( <a href="#">A4 Error codes</a> )
DMACKSN	an..20	M	DUKPT Key Serial Number used to generate the DUKPT MAC (parameter DMAC).
DMAC	an16	M	DUKPT Message Authentication Code, which is formed over the entire message (all parameters except DMAC). See chapter " <a href="#">Formation of the DUKPTMAC</a> ".

Response parameters for Cut-Off

## EMV data elements

The EMV data block is sent as hex string. The data is TLV coded. A detailed description of TLV and the EMV tags can be found in the EMV Specification "EMV v4.3 Book 3 Application Specification", which can be downloaded here: <https://www.emvco.com/specifications.aspx?id=223blockedURL>

See Annex A for a tag list.

The following tags are required for a credit card payment when they are provided by the terminal or the card:

Tag	Description
9F06	Application Identifier (AID)
9F26	Application Cryptogram
9F27	Cryptogram Information Data
9F10	Issuer Application Data (IAD)
9F37	Unpredictable Number
9F36	Application Trx. Counter (ATC)
95	Terminal Verification Results
9A	Transaction Date
9C	Transaction Type
9F02	Transaction Amount
5F2A	Transaction Currency Code
82	Application Interchange Profile
9F1A	Terminal Country Code
9F03	Amount, Other (Cashback Amount if applicable)
9F33	Terminal Capabilities Must be sent for SEPAELV transactions.
9F34	CVM Results Must be sent for SEPAELV transactions.
9F35	Terminal Type
9F1E	Interface Device (IFD) Serial No
9F53	Transaction Category Code
84	Dedicated File Name
9F09	Terminal Application Version No.



01 Purchase (Sale)  
 02 Reversal  
 03 Refund  
 05 Authorization (Reservation)  
 06 Incremental Auth  
 0B Capture  
 CF Cut Off  
 E0 HSM as a Service  
 F0 Automatic reversal  
 F1 Inquire  
 F2 Terminal Configuration

## Explanations

Tag	Description
<b>01 Purchase (CT: Sale)</b>	Authorization and Capture in one transaction is called Sale. When OfflineSale=true, the sale is processed as an offline/merchant risk transaction without prior online authorization.
<b>02 Reversal</b>	Reversal of Authorization; Reversal of Sales (only possible if settlement has not yet taken place at the acquirer. Otherwise only credit is possible)
<b>03 Refund (CT: Credit)</b>	Refund at POS without previous Sale
<b>05 (Pre-) Authorize</b>	Increment possible (CT: Reservation)
<b>06 Pre- Authorization</b>	Increment possible (CT: Reservation)
<b>0B Capture</b>	Capture an Authorization