

EMI Calculator v2.0

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1 Overview

This document explains how to integrate the EMI calculator in your application.

2 API Contracts

2.1 EMI Calculator

It helps in fetching offers for single/multiple products.

2.1.1 Request

2.1.1.1 Content Type & URL's

Content Type	application/json
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UAT	https://uat.pinepg.in/api/v2/emi/calculator
Production	https://pinepg.in/api/v2/emi/calculator

2.1.1.2 Body Params

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_data	object	It contains information about merchant.	M
payment_data	object	It contains information about payment data.	M
product_details	Array of objects	It contains information about products present in cart	M

merchant_data

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_id	int	Merchant id provided by pine labs	M
merchant_access_code	string	Merchant access code provided by pine labs	M

payment_data

Parameter Name	Type	Description	Mandatory(M)/Optional
amount_in_paisa	long	Total sum of products amount present in cart.	M

product_details

Parameter Name	Type	Description	Mandatory(M)/Optional
product_code	string	Product code present at merchant end	M
product_amount	long	Product amount in paise .	M

2.1.1.3 Sample Request

```
{
  "merchant_data": {
    "merchant_id": "3473",
    "merchant_access_code": "57e39383-b053-4db9-a708-26d8971886e7"
  },
  "payment_data": {
    "amount_in_paisa": 1100000
  },
  "product_details": [
    {
      "product_code": "SM-G975FCWG",
      "product_amount": 550000
    },
    {
      "product_code": "40",
      "product_amount": 550000
    }
  ]
}
```

2.1.2 Response

2.1.2.1 Body Params

Parameter Name	Type	Description
issuer	Array of objects	It contains information about issuing bank EMI details.
response_code	int	It notifies the result of api processing. Value 1 denotes success.
response_message	string	It denotes the message corresponding to above code

issuer

Parameter Name	Type	Description
list_emi_tenure	Array of objects	It contains information about tenures for each issuer
issuer_name	String	Bank Name
is_debit_emi_issuer	Bool	Denotes whether an issuer is debit or credit

list_emi_tenure

Parameter Name	Type	Description
offer_scheme	Object	It contains information about offer applicable on each product
tenure_id	Int	Tenure Id specified at pine labs end
tenure_in_month	String	Tenure name specified at pine labs end
monthly_installment	Long	Emi amount in paise
bank_interest_rate	Long	Interest rate for which bank emi is calculated. Its value is percentage multiplied by 10000
interest_pay_to_bank	Long	Interest pay to bank in paise

total_offered_discount_cashback_amount	Long	Total sum of discount applicable on cart. It is in paise.
loan_amount	Long	Amount in paise on which loan will be booked
auth_amount	Long	Bank authorization amount in paise

offer_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.
emi_scheme	Object	It contains information about bank EMI scheme.

product_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

emi scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 106-Brand EMI 108-Product Discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 106-Brand EMI 108-Product Discount 112-Subvention discount
is scheme valid	Bool	Is scheme is valid

2.1.2.2 Sample Response

```

{"issuer":{"list_emi_tenure":{"offer_scheme":{"product_details":{"schemes":{"scheme_id":1682,"program_type":112,"is_scheme_valid":true},"product_code":"SM-G975FCWG","product_amount":550000,"subvention_cashback_discount":11705,"product_discount":0,"subvention_cashback_discount_percentage":21500,"product_discount_percentage":0,"subvention_type":1},"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true},"tenure_id":"3","tenure_in_month":"3","monthly_installment":370652,"bank_interest_rate":130000,"interest_pay_to_bank":23661,"total_offered_discount_cashback_amount":11705,"loan_amount":1088295,"auth_amount":1088295},"offer_scheme":{"product_details":{"schemes":{"scheme_id":1682,"program_type":112,"is_scheme_valid":true},"product_code":"SM-G975FCWG","product_amount":550000,"subvention_cashback_discount":20266,"product_discount":0,"subvention_cashback_discount_percentage":37000,"product_discount_percentage":0,"subvention_type":1},"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true},"tenure_id":"6","tenure_in_month":"6","monthly_installment":186840,"bank_interest_rate":130000,"interest_pay_to_bank":41306,"total_offered_discount_cashback_amount":20266,"loan_amount":1079734,"auth_amount":1079734},"offer_scheme":{"product_details":{"schemes":{"scheme_id":1682,"program_type":112,"is_scheme_valid":true},"product_code":"SM-

```

```
G975FCWG","product_amount":550000,"subvention_cashback_discount":30756,"product_discount":0,"subvention_cashback_discount_percentage":56000,"product_discount_percentage":0,"subvention_type":1,{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true},"tenure_id":"9","tenure_in_month":"9","monthly_installment":125841,"bank_interest_rate":140000,"interest_pay_to_bank":63325,"total_offered_discount_cashback_amount":30756,"loan_amount":1069244,"auth_amount":1069244},"offer_scheme":{"product_details":[{"schemes":[{"scheme_id":1682,"program_type":112,"is_scheme_valid":true}],"product_code":"SM-
G975FCWG","product_amount":550000,"subvention_cashback_discount":39532,"product_discount":0,"subvention_cashback_discount_percentage":56000,"product_discount_percentage":0,"subvention_type":1,{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true},"tenure_id":"12","tenure_in_month":"12","monthly_installment":95215,"bank_interest_rate":140000,"interest_pay_to_bank":82112,"total_offered_discount_cashback_amount":39532,"loan_amount":1060468,"auth_amount":1060468},"offer_scheme":{"product_details":[{"schemes":[{"scheme_id":1682,"program_type":112,"is_scheme_valid":true}],"product_code":"SM-
G975FCWG","product_amount":550000,"subvention_cashback_discount":60209,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":1,{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true},"tenure_id":"18","tenure_in_month":"18","monthly_installment":64867,"bank_interest_rate":150000,"interest_pay_to_bank":127815,"total_offered_discount_cashback_amount":60209,"loan_amount":1039791,"auth_amount":1039791},"issue_r_name":"HDFC","is_debit_emi_issuer":false},"response_code":1,"response_message":"SUCCESS"}
```

2.1.1.1 Single Cart Request

```
{"product_details":[{"product_code":"SM-
G988BZAP","product_amount":9000000}], "payment_data":{"amount_in_paisa":9000000}, "merchant_data":{"merchant_access_code":"dsfff33-5e6e-411a-99fe-dsdsjsfff", "merchant_id":"10838"}}
```

2.1.1.2 Single Cart Response

```
{"issuer":{"list_emi_tenure":[{"offer_scheme":{"product_details":[{"schemes":[],"product_code":"SM-
G988BZAP","product_amount":9000000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":3,"bank_interest_rate_percentage":150000,"bank_interest_rate":747888},"emi_scheme":{"scheme_id":21878,"program_type":105,"is_scheme_valid":true},"tenure_id":"12","tenure_in_month":"12","monthly_installment":812324,"bank_interest_rate":150000,"interest_pay_to_bank":747888,"total_offered_discount_cashback_amount":0,"loan_amount":9000000,"auth_amount":9000000},"offer_scheme":{"product_details":[{"schemes":[],"product_code":"SM-
G988BZAP","product amount":9000000,"subvention cashback discount":0,"product discount":0,"subvention cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":3,"bank_interest_rate_percentage":150000,"bank_interest_rate":1473096},"emi_scheme":{"scheme_id":21878,"program_type":105,"is_scheme_valid":true},"tenure_id":"24","tenure_in_month":"24","monthly_installment":436379,"bank_interest_rate":150000,"interest_pay_to_bank":1473096,"total_offered_discount_cashback amount":0,"loan amount":9000000,"auth_amount":9000000},"offer_scheme":{"product_details":[{"schemes":[],"product_code":"SM-
G988BZAP","product_amount":9000000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":3,"bank_interest_rate_percentage":150000,"bank_interest_rate":571806},"emi_scheme":{"scheme_id":21878,"program_type":105,"is_scheme_valid":true},"tenure_id":"9","tenure_in_month":"9","monthly_installment":1063534,"bank_interest_rate":150000,"interest_pay_to_bank":571806,"total_offered_discount_cashback_amount":0,"loan_amount":9000000,"auth_amount":9000000},"offer_scheme":{"product_details":[{"schemes":[],"product_code":"SM-
G988BZAP","product amount":9000000,"subvention cashback discount":0,"product discount":0,"subvention cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":3,"bank_interest_rate_percentage":150000,"bank_interest_rate":397824},"emi_scheme":{"scheme_id":21878,"program_type":105,"is_scheme_valid":true},"tenure_id":"6","tenure_in_month":"6","monthly_installment":1566304,"bank_interest_rate":150000,"interest_pay_to_bank":397824,"total_offered_discount_cashback amount":0,"loan amount":9000000,"auth_amount":9000000}}
```



```
{,"offer_scheme":{"product_details":[{"schemes":[],"product_code":"SM-G988BZAP","product_amount":9000000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":3,"bank_interest_rate_percentage":150000,"bank_interest_rate":1106334}],emi_scheme":{"scheme_id":21878,"program_type":105,"is_scheme_valid":true}},tenure_id:"18",tenure_in_month:"18",monthly_installment:561463,"bank_interest_rate":150000,"interest_pay_to_bank":1106334,"total_offered_discount_cashback_amount":0,"loan_amount":9000000,"auth_amount":9000000}],issuer_name:"HDFC","is_debit_emi_issuer":false}],response_code":1,"response_message":"SUCCESS"}
```

Note:

1. Subvention Types
 - a. NO COST EMI -When Subvention discount/cashback given to customer is equal to interest paid by customer
 - b. LOW COST EMI-When subvention discount/cashback is given to customer is less than interest paid by customer.
 - c. STANDARD EMI-When there is no subvention discount/cashback given to customer
2. EMI Model
 - a. Single Cart Model: In this EMI is calculated on one product. This model supports the pre cashback, post cashback and instant discount subvention.
 - b. Multi Cart Model: In this EMI is calculated on multiple products. This model supports the instant discount subvention only.

3 Cardless Overview

This document explains how to integrate the EMI calculator in your application, and which brings both Cardless and Card data details in single API call.

4 API Contracts

4.1 EMI Calculator Cardless

It helps in fetching offers for single/multiple products for both CARD and CARDLESS schemes. Here we need to use the API version of V3 to get both data in single call.

2.1.3 Request

2.1.3.1 Content Type & URL's

Content Type	application/json
UAT	https://uat.pinepg.in/api/v3/emi/calculator
Production	https://pinepg.in/api/v3/emi/calculator

2.1.3.2 Body Params

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_data	object	It contains information about merchant.	M
payment_data	object	It contains information about payment data.	M
product_details	Array of objects	It contains information about products present in cart	M

merchant_data

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_id	int	Merchant id provided by pine labs	M
merchant_access_code	string	Merchant access code provided by pine labs	M

payment_data

Parameter Name	Type	Description	Mandatory(M)/Optional
amount_in_paisa	long	Total sum of products amount present in cart.	M

product_details

Parameter Name	Type	Description	Mandatory(M)/Optional
product_code	string	Product code present at merchant end	M
product_amount	long	Product amount in paise .	M

2.1.3.3 Sample Request

Card :

```
{
  "merchant_data": {
    "merchant_id": "3473",
    "merchant_access_code": "57e39383-b053-4db9-a708-26d8971886e7"
  },
  "payment_data": {
    "amount_in_paisa": 1100000
  },
  "product_details": [
    {
      "product_code": "SM-G975FCWG",
      "product_amount": 550000
    },
    {
      "product_code": "40",
      "product_amount": 550000
    }
  ]
}
```

Cardless:

```
{
  "merchant_data": {
    "merchant_id": "279082",
    "merchant_access_code": "efd05c0c-39f1-4232-bd6f-6d3a8608e1be"
  },
  "payment_data": {
    "amount_in_paisa": 200000
  },
  "product_details": [
    {
      "product_code": "MQ9P3HN/A",
      "product_amount": 200000
    }
  ]
}
```

2.1.4 Response

2.1.5

2.1.5.1 Body Params

Parameter Name	Type	Description
issuer	Array of objects	It contains information about issuing bank EMI details.
response_code	int	It notifies the result of API processing. Value 1 denotes success.
response_message	string	It denotes the message corresponding to above code

issuer

Parameter Name	Type	Description
list_emi_tenure	Array of objects	It contains information about tenures for each issuer
issuer_name	String	Bank Name
is_debit_emi_issuer	Bool	Denotes whether an issuer is debit or credit

list_emi_tenure

Parameter Name	Type	Description
offer_scheme	Object	It contains information about offer applicable on each product
tenure_id	Int	Tenure Id specified at pine labs end
tenure_in_month	String	Tenure name specified at pine labs end
monthly_installment	Long	Emi amount in paise
bank_interest_rate	Long	Interest rate for which bank emi is calculated. Its value is percentage multiplied by 10000
interest_pay_to_bank	Long	Interest pay to bank in paise

total_offered_discount_cashback_amount	Long	Total sum of discount applicable on cart. It is in paise.
loan_amount	Long	Amount in paise on which loan will be booked
auth_amount	Long	Bank authorization amount in paise

offer_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.
emi_scheme	Object	It contains information about bank EMI scheme.

product_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage. multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low-cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program. applicable on product.

emi_scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells the scheme of which type.105-Bank EMI 106-Brand EMI 108-Product Discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme being valid

schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells the scheme of which type.105-Bank EMI 106-Brand EMI 108-Product Discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

2.1.5.2 Sample Response

Card:

```
{
  "issuer": {
    "list_emi_tenure": [
      {
        "offer_scheme": {
          "product_details": {
            "schemes": [
              {
                "scheme_id": 1682,
                "program_type": 112,
                "is_scheme_valid": true
              }
            ],
            "product_code": "SM-G975FCWG",
            "product_amount": 550000,
            "subvention_cashback_discount": 11705,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 21500,
            "product_discount_percentage": 0,
            "subvention_type": 1
          },
          "schemes": [],
          "product_code": "40",
          "product_amount": 550000,
          "subvention_cashback_discount": 0,
          "product_discount": 0,
          "subvention_cashback_discount_percentage": 0,
          "product_discount_percentage": 0
        },
        "emi_scheme": {
          "scheme_id": 1683,
          "program_type": 105,
          "is_scheme_valid": true
        },
        "tenure_id": "3",
        "tenure_in_month": "3",
        "monthly_installment": 370652,
        "bank_interest_rate": 130000,
        "interest_pay_to_bank": 23661,
        "total_offered_discount_cashback_amount": 11705,
        "loan_amount": 1088295,
        "auth_amount": 1088295
      },
      {
        "offer_scheme": {
          "product_details": [
            {
              "schemes": [
                {
                  "scheme_id": 1682,
                  "program_type": 112,
                  "is_scheme_valid": true
                }
              ],
              "product_code": "SM-G975FCWG",
              "product_amount": 550000,
              "subvention_cashback_discount": 20266,
              "product_discount": 0,
              "subvention_cashback_discount_percentage": 37000,
              "product_discount_percentage": 0,
              "subvention_type": 1
            },
            {
              "schemes": [],
              "product_code": "40",
              "product_amount": 550000,
              "subvention_cashback_discount": 0,
              "product_discount": 0,
              "subvention_cashback_discount_percentage": 0,
              "product_discount_percentage": 0
            }
          ],
          "emi_scheme": {
            "scheme_id": 1683,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": "6",
          "tenure_in_month": "6",
          "monthly_installment": 186840,
          "bank_interest_rate": 130000,
          "interest_pay_to_bank": 41306,
          "total_offered_discount_cashback_amount": 20266,
          "loan_amount": 1079734,
          "auth_amount": 1079734
        },
        "offer_scheme": {
          "product_details": [
            {
              "schemes": [
                {
                  "scheme_id": 1682,
                  "program_type": 112,
                  "is_scheme_valid": true
                }
              ],
              "product_code": "SM-
```

```
G975FCWG","product_amount":550000,"subvention_cashback_discount":30756,"product_discount":0,"subvention_cashback_discount_percentage":56000,"product_discount_percentage":0,"subvention_type":1},{{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true}},{"tenure_id":"9","tenure_in_month":"9","monthly_installment":125841,"bank_interest_rate":140000,"interest_pay_to_bank":63325,"total_offered_discount_cashback_amount":30756,"loan_amount":1069244,"auth_amount":1069244},{{"offer_scheme":{"product_details":[{"schemes":[{"scheme_id":1682,"program_type":112,"is_scheme_valid":true}],product_code":"SM-G975FCWG","product_amount":550000,"subvention_cashback_discount":39532,"product_discount":0,"subvention_cashback_discount_percentage":56000,"product_discount_percentage":0,"subvention_type":1},{{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true}},{"tenure_id":"12","tenure_in_month":"12","monthly_installment":95215,"bank_interest_rate":140000,"interest_pay_to_bank":82112,"total_offered_discount_cashback_amount":39532,"loan_amount":1060468,"auth_amount":1060468},{{"offer_scheme":{"product_details":[{"schemes":[{"scheme_id":1682,"program_type":112,"is_scheme_valid":true}],product_code":"SM-G975FCWG","product_amount":550000,"subvention_cashback_discount":60209,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0,"subvention_type":1},{{"schemes":[],"product_code":"40","product_amount":550000,"subvention_cashback_discount":0,"product_discount":0,"subvention_cashback_discount_percentage":0,"product_discount_percentage":0},"emi_scheme":{"scheme_id":1683,"program_type":105,"is_scheme_valid":true}},{"tenure_id":"18","tenure_in_month":"18","monthly_installment":64867,"bank_interest_rate":150000,"interest_pay_to_bank":127815,"total_offered_discount_cashback_amount":60209,"loan_amount":1039791,"auth_amount":1039791}],issue_r_name":"HDFC","is_debit_emi_issuer":false}],response_code":1,"response_message":"SUCCESS"}
```

Cardless:

```
{ "issuer": { "list_emi_tenure": [ { "offer_scheme": { "product_details": { "schemes": [], "product_code": "MQ9P3HN/A", "product_amount": 200000, "subvention_cashback_discount": 0, "product_discount": 0, "subvention_cashback_discount_percentage": 0, "product_discount_percentage": 0, "subvention_type": 3, "bank_interest_rate_percentage": 160000, "bank_interest_rate": 17752 }, "emi_scheme": { "scheme_id": 230563, "program_type": 105, "is_scheme_valid": true }, "tenure_id": "12", "tenure_in_month": "12", "monthly_installment": 18146, "bank_interest_rate": 160000, "interest_pay_to_bank": 17752, "total_offered_discount_cashback_amount": 0, "loan_amount": 200000, "auth_amount": 200000 }, { "offer_scheme": { "product_details": { "schemes": [], "product_code": "MQ9P3HN/A", "product_amount": 200000, "subvention_cashback_discount": 0, "product_discount": 0, "subvention_cashback_discount_percentage": 0, "product_discount_percentage": 0, "subvention_type": 3, "bank_interest_rate_percentage": 160000, "bank_interest_rate": 26278 }, "emi_scheme": { "scheme_id": 230563, "program_type": 105, "is_scheme_valid": true }, "tenure_id": "18", "tenure_in_month": "18", "monthly_installment": 12571, "bank_interest_rate": 160000, "interest_pay_to_bank": 26278, "total_offered_discount_cashback_amount": 0, "loan_amount": 200000, "auth_amount": 200000 }, { "offer_scheme": { "product_details": { "schemes": [], "product_code": "MQ9P3HN/A", "product_amount": 200000, "subvention_cashback_discount": 0, "product_discount": 0, "subvention_cashback_discount_percentage": 0, "product_discount_percentage": 0, "subvention_type": 3, "bank_interest_rate_percentage": 160000, "bank_interest_rate": 35008 }, "emi_scheme": { "scheme_id": 230563, "program_type": 105, "is_scheme_valid": true }, "tenure_id": "24", "tenure_in_month": "24", "monthly_installment": 9792, "bank_interest_rate": 160000, "interest_pay_to_bank": 35008, "total_offered_discount_cashback_amount": 0, "loan_amount": 200000, "auth_amount": 200000 }, "issuer_name": "HDFCCARDLESS", "is_debit_emi_issuer": true }, "response_code": 1, "response_message": "SUCCESS" }
```

2.1.1.3 Single Cart Request

Card:

```
{ "product_details": { "product_code": "SM-G988BZAP", "product_amount": 9000000 }, "payment_data": { "amount_in_paisa": 9000000 }, "merchant_data": { "merchant_access_code": "dsff33-5e6e-411a-99fe-dsdsjsfff", "merchant_id": "10838" } }
```

Cardless:

```
{ "merchant_data": { "merchant_id": 279082, "merchant_access_code": "cfd05c0c-39f1-4232-bd6f-6d3a8608e1be" }, "payment_data": { "amount_in_paisa": 10000000 }, "product_details": { "product_code": "MQ9P3HN/A", "product_amount": 10000000 } }
```

2.1.1.4 Single Cart Response

Card:

```
{
  "issuer": {
    "list_emi_tenure": [
      {
        "offer_scheme": {
          "product_details": {
            "schemes": [],
            "product_code": "SM-G988BZAP",
            "product_amount": 9000000,
            "subvention_cashback_discount": 0,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 0,
            "product_discount_percentage": 0,
            "subvention_type": 3,
            "bank_interest_rate_percentage": 150000,
            "bank_interest_rate": 747888
          },
          "emi_scheme": {
            "scheme_id": 21878,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": 12,
          "tenure_in_month": 12,
          "monthly_installment": 812324,
          "bank_interest_rate": 150000,
          "interest_pay_to_bank": 747888,
          "total_offered_discount_cashback_amount": 0,
          "loan_amount": 9000000,
          "auth_amount": 9000000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [],
            "product_code": "SM-G988BZAP",
            "product_amount": 9000000,
            "subvention_cashback_discount": 0,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 0,
            "product_discount_percentage": 0,
            "subvention_type": 3,
            "bank_interest_rate_percentage": 150000,
            "bank_interest_rate": 1473096
          },
          "emi_scheme": {
            "scheme_id": 21878,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": 24,
          "tenure_in_month": 24,
          "monthly_installment": 436379,
          "bank_interest_rate": 150000,
          "interest_pay_to_bank": 1473096,
          "total_offered_discount_cashback_amount": 0,
          "loan_amount": 9000000,
          "auth_amount": 9000000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [],
            "product_code": "SM-G988BZAP",
            "product_amount": 9000000,
            "subvention_cashback_discount": 0,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 0,
            "product_discount_percentage": 0,
            "subvention_type": 3,
            "bank_interest_rate_percentage": 150000,
            "bank_interest_rate": 571806
          },
          "emi_scheme": {
            "scheme_id": 21878,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": 9,
          "tenure_in_month": 9,
          "monthly_installment": 1063534,
          "bank_interest_rate": 150000,
          "interest_pay_to_bank": 571806,
          "total_offered_discount_cashback_amount": 0,
          "loan_amount": 9000000,
          "auth_amount": 9000000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [],
            "product_code": "SM-G988BZAP",
            "product_amount": 9000000,
            "subvention_cashback_discount": 0,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 0,
            "product_discount_percentage": 0,
            "subvention_type": 3,
            "bank_interest_rate_percentage": 150000,
            "bank_interest_rate": 397824
          },
          "emi_scheme": {
            "scheme_id": 21878,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": 6,
          "tenure_in_month": 6,
          "monthly_installment": 1566304,
          "bank_interest_rate": 150000,
          "interest_pay_to_bank": 397824,
          "total_offered_discount_cashback_amount": 0,
          "loan_amount": 9000000,
          "auth_amount": 9000000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [],
            "product_code": "SM-G988BZAP",
            "product_amount": 9000000,
            "subvention_cashback_discount": 0,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 0,
            "product_discount_percentage": 0,
            "subvention_type": 3,
            "bank_interest_rate_percentage": 150000,
            "bank_interest_rate": 1106334
          },
          "emi_scheme": {
            "scheme_id": 21878,
            "program_type": 105,
            "is_scheme_valid": true
          },
          "tenure_id": 18,
          "tenure_in_month": 18,
          "monthly_installment": 561463,
          "bank_interest_rate": 150000,
          "interest_pay_to_bank": 1106334,
          "total_offered_discount_cashback_amount": 0,
          "loan_amount": 9000000,
          "auth_amount": 9000000
        }
      ]
    },
    "issuer_name": "HDFC",
    "is_debit_emi_issuer": false
  },
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

Cardless:

```
{
  "issuer": {
    "list_emi_tenure": [
      {
        "offer_scheme": {
          "product_details": {
            "schemes": [
              {
                "scheme_id": 230456,
                "program_type": 106,
                "is_scheme_valid": true
              }
            ],
            "product_code": "MQ9P3HN/A",
            "product_amount": 10000000,
            "subvention_cashback_discount": 865000,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 86500,
            "product_discount_percentage": 0,
            "subvention_type": 1,
            "bank_interest_rate_percentage": 160000,
            "bank_interest_rate": 810888
          },
          "emi_scheme": null,
          "tenure_id": 12,
          "tenure_in_month": 12,
          "monthly_installment": 828824,
          "bank_interest_rate": 160000,
          "interest_pay_to_bank": 810888,
          "total_offered_discount_cashback_amount": 865000,
          "loan_amount": 9135000,
          "auth_amount": 9135000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [
              {
                "scheme_id": 230456,
                "program_type": 106,
                "is_scheme_valid": true
              }
            ],
            "product_code": "MQ9P3HN/A",
            "product_amount": 10000000,
            "subvention_cashback_discount": 1065000,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 106500,
            "product_discount_percentage": 0,
            "subvention_type": 2,
            "bank_interest_rate_percentage": 160000,
            "bank_interest_rate": 1174160
          },
          "emi_scheme": null,
          "tenure_id": 18,
          "tenure_in_month": 18,
          "monthly_installment": 561620,
          "bank_interest_rate": 60000,
          "interest_pay_to_bank": 1174160,
          "total_offered_discount_cashback_amount": 1065000,
          "loan_amount": 8935000,
          "auth_amount": 8935000
        },
        "offer_scheme": {
          "product_details": {
            "schemes": [
              {
                "scheme_id": 230456,
                "program_type": 106,
                "is_scheme_valid": true
              }
            ],
            "product_code": "MQ9P3HN/A",
            "product_amount": 10000000,
            "subvention_cashback_discount": 1165000,
            "product_discount": 0,
            "subvention_cashback_discount_percentage": 116500,
            "product_discount_percentage": 0,
            "subvention_type": 2,
            "bank_interest_rate_percentage": 160000,
            "bank_interest_rate": 1547088
          },
          "emi_scheme": null,
          "tenure_id": 24,
          "tenure_in_month": 24,
          "monthly_installment": 432587,
          "bank_interest_rate": 160000,
          "interest_pay_to_bank": 1547088,
          "total_offered_discount_cashback_amount": 1165000,
          "loan_amount": 8835000,
          "auth_amount": 8835000
        }
      ]
    },
    "issuer_name": "HDFC CARDLESS",
    "is_debit_emi_issuer": true
  },
  "response_code": 1,
  "response_message": "SUCCESS"
}
```


Note:

3. Subvention Types
 - a. NO COST EMI -When Subvention discount/cashback given to customer is equal to interest paid by customer.
 - b. LOW-COST EMI-When subvention discount/cashback is given to customer is less than interest paid by customer.
 - c. STANDARD EMI-When there is no subvention discount/cashback given to customer.
4. EMI Model
 - a. Single Cart Model: In this EMI is calculated on one product. This model supports the pre cashback, post cashback and instant discount subvention.
 - b. Multi Cart Model: In this EMI is calculated on multiple products. This model supports instant discount subvention only.

4.2 Scheme Validation

It checks the validity of selected offer on a card number as well as the Mobile number.

The difference between card and cardless scheme validation part is on the request payload for card data remains same which we have on V3 as well.

For cardless scheme validation in addition to payload we need to pass the extra parameter in payload:

For DC EMI we will be passing the card + mobile number for validation but in Cardless we don't need to pass the card object itself, we just need to pass the additional_data with mobile number alone.

"additional_data": {"mobile_no": "9560164441"}

The mobile number which is used for payment time the same mobile number need to be used here as well.

3.2.1.1 Content Type & URL's

Content Type	application/json
--------------	------------------

UAT	https://uat.pinepg.in/api/v3/scheme/validation
Production	https://pinepg.in/api/v3/scheme/validation

Request

Body Params:

Parameter Name	Type	Description
merchant_data	Object	It contains information about merchant.
payment_data	Object	It contains information about payment
emi_data	Object	It contains information about emi data
additional_data	Object	It contains information about the mobile number.

merchant_data

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_id	int	Merchant id provided by pine labs	M
merchant_access_code	string	Merchant access code provided by pine labs	M

payment_data

Parameter Name	Type	Description	Mandatory(M)/Optional
amount_in_paisa	long	Total sum of products amount present in cart.	M

card_data

Parameter Name	Type	Description
card_number	String	Card number
card_expiry_year	String	Card expiry year having format YYYY
card_expiry_month	String	Card expiry month having format MM
card_holder_name	String	Card holder name

additional_data

Parameter Name	Type	Description
mobile_number	string	10-digit mobile number

tokenize_card_data

Parameter Name	Type	Description
token	String	Card token received from token requestor
expiration_month	String	Card expiry month having format MM
expiration_year	String	Card expiry year having format YYYY
last4Digit	String	Last 4 Digit of Card

emi_data

Parameter Name	Type	Description
offer_scheme	Object	It contains information about offer applicable on each product
tenure_id	Int	Tenure Id specified at pine labs end
tenure_in_month	String	Tenure name specified at pine labs end
monthly_installment	Long	Emi amount in paise
bank_interest_rate	Long	Interest rate for which bank emi is calculated. Its value is percentage multiplied by 10000
interest_pay_to_bank	Long	Interest pay to bank in paise
total_offered_discount_cashback_amount	Long	Total sum of discount applicable on cart. It is in paise.
loan_amount	Long	Amount in paise on which loan will be booked
auth_amount	Long	Bank authorization amount in paise.

offer_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.

emi_scheme	Object	It contains information about bank EMI scheme.
------------	--------	--

product_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

emi_sche me

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product

program_type	Int	It tells scheme of which type. 105-Bank EMI 106- Brand EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

Schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 106- Brand EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

Sample Request for All Credit cards:

Card:

```
{
  "merchant_data": {
    "merchant_id": 3473,
    "merchant_access_code": "57e39383-b053-4db9-a708-26d8971886e7"
  },
  "payment_data": {
    "amount_in_paisa": 1100000
  },
  "card_data": {
    "card_number": "4012001037141112",
    "card_expiry_year": "2020",
    "card_expiry_month": "09",
    "card_holder_name": "harsh"
  },
  "emi_data": {
    "offer_scheme": {
      "product_details": [
        {
          "schemes": [
            {
              "scheme_id": 1682,
              "program_type": 112,
              "is_scheme_valid": true
            }
          ],
          "product_code": "SM-G975FCWG",
          "product_amount": 550000,
          "subvention_cashback_discount": 11705,
          "product_discount": 0,
          "subvention_cashback_discount_percentage": 21500,
          "product_discount_percentage": 0,
          "subvention_type": 1
        }
      ],
      "schemes": [
        {
          "product_code": "40",
          "product_amount": 550000,
          "subvention_cashback_discount": 0,
          "product_discount": 0,
          "subvention_cashback_discount_percentage": 0,
          "product_discount_percentage": 0
        }
      ],
      "emi_scheme": {
        "scheme_id": 1683,
        "program_type": 105,
        "is_scheme_valid": true
      },
      "tenure_id": "3",
      "tenure_in_month": "3",
      "monthly_installment": 370652,
      "bank_interest_rate": 130000,
      "interest_pay_to_bank": 23661,
      "total_offered_discount_cashback_amount": 11705,
      "loan_amount": 1088295,
      "auth_amount": 1088295
    }
  }
}
```

Cardless:

```
{
  "merchant_data": {
    "merchant_id": 279082,
    "merchant_access_code": "cfd05c0c-39f1-4232-bd6f-6d3a8608e1be"
  },
  "payment_data": {
    "amount_in_paisa": 2000000
  },
  "card_data": {
    "card_number": ""
  },
  "additional_data": {
    "mobile_no": "9560164442"
  },
  "emi_data": {
    "offer_scheme": {
      "product_details": [
        {
          "schemes": [
            {
              "scheme_id": 230456,
              "program_type": 106,
              "is_scheme_valid": true
            }
          ],
          "product_code": "MQ9P3HN/A",
          "product_amount": 2000000,
          "subvention_cashback_discount": 233000,
          "product_discount": 0,
          "subvention_cashback_discount_percentage": 116500,
          "product_discount_percentage": 0,
          "subvention_type": 2,
          "bank_interest_rate_percentage": 160000,
          "bank_interest_rate": 309408
        }
      ],
      "emi_scheme": null,
      "tenure_id": "24",
      "tenure_in_month": "24",
      "monthly_installment": 86517,
      "bank_interest_rate": 160000,
      "interest_pay_to_bank": 309408,
      "total_offered_discount_cashback_amount": 233000,
      "loan_amount": 1767000,
      "auth_amount": 1767000
    }
  }
}
```

Response

Params

Parameter Name	Type	Description
response_code	int	It notifies the result of api processing. Value 1 denotes success.
response_message	string	It denotes the message corresponding to above code
offer_scheme	Object	It contains information about offer applicable on each product. <i>This tag will come in response only in case of failure.</i>

offer_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.
emi_scheme	Object	It contains information about bank EMI scheme.

product_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage multiplied by 10000.

product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

emi_scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 106- Brand EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

Schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 106- Brand EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid
reasons	Array of object	Description for failure of schemes

Reasons

Parameter Name	Type	Description
reason_code	int	It denotes the reason code
reason_message	String	It denotes the reason message again the code

Sample Response

Success response

```
{
  "response_code": 1,
  "response_message": "SUCCESS",
}
```

Failure response

```
{ "offer_scheme": { "product_details": [ { "schemes": [ { "scheme_id": 8055, "program_type": 112, "is_scheme_valid": true
}, { "scheme_id": 8042, "program_type": 108, "is_scheme_valid": false, "reasons": [ { "reason_code": -298,
"reason_message": "OUTDATED_SCHEME_PRESENT" } ] }, "product_code": "SM-G950FZKDINS",
"product_amount": 550000, "subvention_cashback_discount": 9675, "product_discount": 100000,
"subvention_cashback_discount_percentage": 21500, "product_discount_percentage": 100000, "subvention_type": 1 }, {
"schemes": [], "product_code": "6504", "product_amount": 4500000, "subvention_cashback_discount": 0,
"product_discount": 0, "subvention_cashback_discount_percentage": 0, "product_discount_percentage": 0 } ],
"emi_scheme":
{ "scheme_id": 8056, "program_type": 105, "is_scheme_valid": true } }, "response_code": -289, "response_message":
"SCHEME VALIDATION FAILED" }
{
  "response_message": "TOTAL SALE TXN COUNT EXCEEDS MAX ALLOWED TXN COUNT",
  "response_code": -60
}
```