

# Data Module

This module is to construct the data in term of dataclass to make sure that all the input and output follow this data schema.

Although there are Protobuf classes, some types are not exists. Therefore, additional types of data will be declared here.

note Note thatbase andquote is the first and the second price symbols respectively e.g. BTC/USD price rate has a base of BTC and a quote of USD.

## ReferenceDataUpdated

Attribute Type Description base integer Base's resolve time quote integer Quote's resolve time

## ReferenceDataRequestID

Attribute Type Description base integer Base's request ID quote integer Quote's request ID

## ReferenceData

Attribute Type Description pair string The token pair e.g. "BTC/USD" rate float Price rate updatedAt[ReferenceDataUpdated](#) Price update time requestId [ReferenceDataRequestID](#) OracleRequest ID

## Syntax

( method )

Client . getReferenceData ( pairs : string [ ] ,

minCount : number ,

askCount : number ) :

Promise < Data . ReferenceData [ ]

## Example

```
import
```

```
{
```

```
Client ,
```

```
Data
```

```
}
```

```
from
```

```
"@bandprotocol/bandchain.js"
```

```
async
```

```
function
```

```
getReferenceData ( )
```

```
{ const grpcEndpoint =
```

```
{ GRPC_ENDPOINT } const client =
```

```
new
```

```
Client ( grpcEndpoint ) const data =
```

```
await client . getReferenceData ( [ "BTC/USD" ,
```

```
"ETH/BTC" ] ,
```

```
3 ,
```

```
4 ) console . log ( typeof data )
```

```
// Promise } Previous Client Module Next Message Module
```