How to use RDA Index on Web3

Introduction

The Airnode RDA Index API provides intrinsic value (IV) analysis data for cryptoassets. The following data sets are available through the API:

(1) RDA IV Ranking: Asset ranking by intrinsic value
(2) RDA IV Rating: Asset ratings by investability
(3) RDA Pricing: Asset pricing data based on their underlying intrinsic attributes
(4) RDA Exchange Rates: Intrinsic exchange rate between assets
(5) RDA 10 Index: A fundamentally-weighted index for cryptoassets: Top 10 assets by intrinsic value, investibility, low systemic risk and sustainable returns

Home Page: rdaindex.com
Web2 Docs: rdaindex.com/index-methodology

Call this Airnode API

Read the [Airnode developer documentation](#) to learn how to call Airnode APIs. You'll need the **Provider ID** to call any endpoint in this API.

Provider ID: 0xf2e72b2362478bf542101f0b2cdbac92bcfa54a2c47deecadd9688470837e9d6

Provider XPub:
xpub661MyMwAqRbcEqaKrwvNZVvCAwjgFNmsbnr2PfqeQCM5yNnLGHi6tMMHZVjBPNW6gXizXGAvXqvhowP2N2PPpSqkzYmFj5DUzeG3HXBc5fz

[Reserved Parameters](#) are used to control Airnode behavior and are available for all endpoints.

Available on Networks:

Find more information on each chain [Here](#).

Chain	Airnode RRP Contract
Rinkeby	0xF9C39ec11055508BddA0Bc2a0234aBbbC09a3DeC

Endpoints

1. [GET /ivranking](#)
2. [GET /ivrating](#)
3. [GET /pricing](#)
4. [GET /xrates](#)

5. [GET /rdaindex](#)

GET /ivranking

RDA IV RANKING quantifies the instrinsic value (IV) of each cryptoasset. RDA IV Ranking uses a proprietary algorithm to analyse asset attributes and compute their intrinsic value on a 0 to N point scale, where 0 indicates no intrinsic value and N is the highest intrinsic value for a given asset. Using the RDA Methodology, this api gives you the ranking of the crypto assets based on their intrinsic value.

Web2 Docs: [rdaindex.com/index-methodology](#)

You'll need the **Endpoint ID** to call this endpoint.

Endpoint ID: 0x42d949f6ac0a6b8110c53c8b80f1895651f966b6646a645eff797c9ae884aca5

[Request Parameters](#)

```
None
```

[Response](#)

```
{  [
    {
        "Methodology Version": "2.0",
        "API Title": "RDA IV Ranking",
        "Algorithm": "RDA.SLICER_v4.2",
        "ts": "2021-10-23T10:48:51.426674"
    },
    {
        "marketivlevel": 417.8969247591696,
        "marketivlevelAsset": {
            "asset": {
                "id": 2682,
                "name": "Holo",
                "type": null,
                "abbr": "HOT",
                "logo": https://...,
                "marketPrice": 0.006939516516,
                "circulatingSupply": 172895870443.36282,
                "marketCapitalisation": 1199813748.47,
                "crunchLevel": "91.83673469387756",
                "description": "Holo (HOT) is a cryptocurrency and operates on the Ethereum platform... ",
                "ivrank": 1
            },
            "id": 2682,
            "ecosystem": 122.74695047500907,
            "utility": 276.44359108355934,
            "technology": 15.650188039828889,
            "sentiments": 3.0561951607723166,
            "rda_points": 417.8969247591696
        },
        "rdai_ts": 1634985904324,
        "asset_rdaPoints": [
            {
                "asset": {
                    "id": 2682,
                    "name": "Holo",
                    "type": null,
                    "abbr": "HOT",
                    "logo": https://...,
                    "marketPrice": 0.006939516516,
                    "circulatingSupply": 172895870443.36282,
                    "marketCapitalisation": 1199813748.47,
                    "crunchLevel": "91.83673469387756",
                    "description": "Holo (HOT) is a cryptocurrency and operates on the Ethereum platform...
                    "ivrank": 1
                },
                "id": 2682,
                "ecosystem": 122.74695047500907,
                "utility": 276.44359108355934,
                "technology": 15.650188039828889,
                "sentiments": 3.0561951607723166,
                "rda_points": 417.8969247591696
            },
            {
                "asset": {
                    "id": 1027,
                    "name": "Ethereum",
                    "type": null,
                    "abbr": "ETH",
                    ...
            },}
```

GET /ivrating

RDA IV RATING enables crypto users to determine the investibility of cryptoassets. RDA IV Rating enable crypto users and investors to identify asset integrity and systemic risks.

Web2 Docs: rdaindex.com/index-methodology

You'll need the **Endpoint ID** to call this endpoint.

Endpoint ID: 0xe6e7f2f3907f845087c38974bd297119041e8effc3eafb39468f12bbf140547f

Request Parameters

```
None
```

Response

```
{ [
    {
        "Methodology Version": "2.0",
        "API Title": "RDA IV Rating",
        "Algorithm": "RDA.SLICER_v4.2",
        "ts": "2021-10-23T10:59:14.156048"
    },
    [
        {
            "id": 1027,
            "asset": {
                "id": 1027,
                "name": "Ethereum",
                "type": null,
                "abbr": "ETH",
                "logo": https://...,
                "marketPrice": 2895.953508653455,
                "circulatingSupply": 118042478.9365,
                "marketCapitalisation": 341845531046.31,
                "crunchLevel": "95.91836734693877",
                "description": "Ethereum (ETH) is a cryptocurrency . Users are able to generate ETH through
                "ivrank": 2
            },
            "ivrating_score": "86.123760768854702%",
            "ivrating_stars": 4.1123760768547015,
            "ivrating_rank": 1,
            "ecosystem_score": "95.78521241101394%",
            "technology_score": "100.0%",
            "utility_score": "48.709830663317409%",
            "sentiments_score": "100.0%"
        },
        {
            "id": 2682,
            "asset": {
                "id": 2682,
                "name": "Holo",
                "type": null,
                "abbr": "HOT",
                "logo": https://...,
                "marketPrice": 0.006939516516,
                "circulatingSupply": 172895870443.36282,
                "marketCapitalisation": 1199813748.47,
                "crunchLevel": "91.83673469387756",
                "description": "Holo (HOT) is a cryptocurrency and operates on the Ethereum platform...",
                "ivrank": 1
            },
            "ivrating_score": "62.1544233732646%",
            "ivrating_stars": 2.73848077910882,
            ...
        }, }
```

GET /pricing

RDA PRICING shows the asset pricing based on its underlying intrinsic attributes. The RDA Price stands in contrast to the market price to reveal the impact of speculation on each asset.

Web2 Docs: rdaindex.com/index-methodology

You'll need the **Endpoint ID** to call this endpoint.

Endpoint ID: 0xd4c8decf88a2d2c81f2fb1dc6b4a3b1d6d2becfcc9bca63c3a49b70637e572f9

Request Parameters

```
None
```

Response

```
{ [
    {
        "Methodology Version": "2.0",
        "API Title": "RDA Pricing",
        "Algorithm": "RDA.SLICER_v4.2",
        "ts": "2021-10-23T11:00:07.260167"
    },
    [
        {
            "id": 2682,
            "asset": {
                "id": 2682,
                "name": "Holo",
                "type": null,
                "abbr": "HOT",
                "logo": https://...,
                "marketPrice": 0.006939516516,
                "circulatingSupply": 172895870443.36282,
                "marketCapitalisation": 1199813748.47,
                "crunchLevel": "91.83673469387756",
                "description": "Holo (HOT) is a cryptocurrency and operates on the Ethereum platform...",
                "ivrank": 1
            },
            "rda_price": 1.1058294170051186,
            "utility_price": 0.44479111742543537,
            "ecosystem_price": 0.44479111742543537,
            "technology_price": 0.1571151981421117,
            "sentiment_price": 0.05913198401213605,
            "RDAMratio": 159.35251605143935,
            "RDAMratio_rank": 1,
            "rda_marketcap": 191193339614.97644
        },
        {
            "id": 1567,
            "asset": {
                "id": 1567,
                "name": "Nano",
                "type": null,
                "abbr": "NANO",
                "logo": https://...,
                "marketPrice": 3.892111250757,
                "circulatingSupply": 133248297.197,
                "marketCapitalisation": 518617196.66,
                "crunchLevel": "95.91836734693877",
                "description": "Nano (NANO) is a cryptocurrency launched in 2015...",
                "ivrank": 41
            },
            "rda_price": 253.2383136075732,
            "utility_price": 23.61803142048083,
            "ecosystem_price": 108.01190067598493,
            "technology_price": 121.60838151110741,
            ...
        }, }
```

GET /xrates

The RDA Exchange Rate data clarifies the intrinsic exchange rates between cryptoassets based on their underlying attributes. RDA Exchange Rates offers unlimited opportunites to identify the most rewarding trade pair that will maximise the fundamental value of a portfolio.

Web2 Docs: rdaindex.com/index-methodology

You'll need the **Endpoint ID** to call this endpoint.

"id": 2682,

Endpoint ID: 0xcc553df041fd8f113021d8c01b6840d993f979fbbf17d2e0598bf950d7bf8b1f

```
None
```

```
{ ... }
```

GET /rdaindex

RDA 10 Index provides an investible portfolio of the top 10 assets by intrinsic value, investibility, low systemic risk and sustainable returns. The construction of RDA 10 Index Portfolio is guided by the belief that low risk and sustainable returns are driven by intrinsic value. The RDA 10 Index Portfolio is useful for investors guided by clear principles that fundamentals factors drive sustainable market performance.

Web2 Docs: rdaindex.com/index-methodology

You'll need the **Endpoint ID** to call this endpoint.

Endpoint ID: 0x9c125f87dfd3c6e88bebd183ce0004d2a78e30538839acff7ab2a63941f5f828

```
None
```

```
{ [
    {
        "Methodology Version": "2.0",
        "API Title": "RDA Tradeable Index",
        "Algorithm": "RDA.SLICER_v4.2",
        "ts": "2021-10-23T11:00:56.573183"
    },
    {
        "ts": 1634986800000,
        "serial": 957,
        "year": 2021,
        "date": "20211023",
        "rda_level": 1.0413816491060166,
        "constituents": [
            {
                "id": 2682,
                "name": "Holo",
                "abbr": "HOT",
                "logo": https://...,
                "marketPrice": 0.006924729472,
                "marketCapitalisation": 1197257129.59,
                "weight": 0.3058024559793466,
                "rda_points": 417.8914881413085,
                "RDAMratio": 159.69071935891398,
                "return_percentage": -0.0021308464308582575,
                "ti_value": 0.31766670862708396,
                "ivrating_stars": 2.7387624263066326
            },
            {
                "id": 2566,
                "name": "Ontology",
                "abbr": "ONT",
                "logo": https://...,
```

```
            "marketPrice": 0.693040742925,
            "marketCapitalisation": 606583580.36,
            "weight": 0.1172159940959397,
            "rda_points": 81.15450808068597,
            "RDAMratio": 61.21045155639636,
            "return_percentage": -0.002855113682584065,
            "ti_value": 0.11362117075294649,
            "ivrating_stars": 1.0049192122873558
        },
        ...
        ...
        {
            "id": 1274,
            "name": "Waves",
            "abbr": "WAVES",
            "logo": https://...,
            "marketPrice": 20.409505633971,
            "marketCapitalisation": 2173667414.86,
            "weight": 0.04749014035092335,
            "rda_points": 117.82343295247775,
            "RDAMratio": 24.799456403342067,
            "return_percentage": -0.0041023806124041995,
            "ti_value": 0.0357519289287727,
            "ivrating_stars": 1.4279012536112559
        },
        {
            "id": 4847,
            "name": "Stacks",
            "abbr": "STX",
            "logo": https://...,
            "marketPrice": 1.561556480476,
            "marketCapitalisation": 1999250767.64,
            "weight": 0.03350584547765407,
            "rda_points": 76.45800766588272,
            "RDAMratio": 17.496826668444292,
            "return_percentage": -0.003910416504698477,
            "ti_value": 0.031131464637156197,
            "ivrating_stars": 1.0472425457797674
        }
    ],
    "allTimeLow": 0.6653,
    "allTimeHigh": 1.504
} }
```