

Nasdaq Retail Equity Pulse (NREP)

Product Overview

Nasdaq Retail Equity Pulse (NREP) is a real-time analytics product that provides insight into retail investor sentiment across U.S. listed equities.

Retail Equities Pulse measures retail buying and selling activity and generates a normalized sentiment score that reflects the directional conviction of retail market participants. The product is designed to help clients monitor retail participation trends, identify shifts in market sentiment, and support quantitative and discretionary investment workflows.

The data feed is delivered in real time through the Nasdaq Kafkaesque platform and is updated every 60 seconds throughout the U.S. equity trading session.

The Kafka stream provides two message types:

- Heartbeat Message
- **Retail Equity Pulse Message**
- **Retail Equity Flow Message**

Output Analytics

Analytics are published every 60 seconds for all covered U.S. equities.

Sentiment

Retail sentiment is calculated from retail buy and sell activity observed during the calculation interval.

Sentiment values range from:

- +1.0 = Strong Bullish Retail Sentiment
- = Neutral Retail Sentiment
- -1.0 = Strong Bearish Retail Sentiment

Sector Classification

Each symbol is associated with a market sector to support sector-level analysis and aggregation.

Delivery Characteristics

Attribute	Value
Product Name	Nasdaq Retail Equity Pulse
Acronym	NREP
Delivery Method	Kafkaesque Stream
Update Frequency	Every 60 Seconds

Coverage	U.S. Listed Equities
Session Coverage	U.S. Equity Trading Session
Message Format	Apache Avro
Message Type	R

Message Formats

Field Definitions

Field	Type	Description
msgType	String	Value = "0"
timestamp	Long	Epoch timestamp of heartbeat generation

Heartbeat Message:

Heartbeat messages are provided to confirm connectivity and feed health.

Heartbeat Message – Value = 0

```
{
  "type": "record",
  "name": "Heartbeat",
  "namespace": "com.nasdaq",
  "fields": [
    {
      "name": "msgType",
      "type": "string"
    },
    {
      "name": "timestamp",
      "type": "long"
    }
  ]
}
```

Nasdaq Retail Equity Pulse Message

The Retail Equity Pulse message provides per-symbol retail sentiment analytics.

Field Definitions

Field Name	Data Type	Description
date	String	Trading date in YYYY-MM-DD format
timestamp	String	Time associated with the sentiment calculation
symbol	String	Equity ticker symbol
sector	String	Sector associated with the equity symbol
sentiment	Double	Retail sentiment score ranging from -1.0 to +1.0

Retail Equity Pulse Message – Value = R

Schema	Sample
<pre> { "type": "record", "name": "RETAIL_EQUITY_PULSE", "namespace": "com.nasdaq.rad.urefsentiment.output.minute", "fields": [{ "name": "date", "type": "string" }, { "name": "timestamp", "type": "long" }, { "name": "symbol", "type": ["null", "string"], "default": null }, { "name": "sector", "type": ["null", "string"], "default": null }] }</pre>	<pre> { "type": "record", "name": "RETAIL_EQUITY_PULSE", "namespace": "com.nasdaq.rad.urefsentiment.output.minute", "fields": [{ "date": 2026-07-26, "timestamp": 14:27, "symbol": NVDA, "sector": Electronics & IT, "sentiment": 0.14 }] }</pre>

```
"name": "sentiment",
"type": "double"
}
```

Nasdaq Retail Equity Flow Message

The Retail Equity Flow message provides per-symbol retail flow analytics.

Field Definitions

Field Name	Data Type	Description
date	String	Trading date in YYYY-MM-DD format
timestamp	String	Time associated with the sentiment calculation
symbol	String	Equity ticker symbol
sector	String	Sector associated with the equity symbol
Volume_buy	Double	Buy volume traded in that minute
Volume_sell	Double	Sell volume traded in that minute

Retail Equity Flow Message – Value = R

Schema	Sample
<pre>"type": "record", "name": "RETAIL_EQUITY_FLOW", "namespace": "com.nasdaq.rad.urefsentiment.output.minute.flow", "fields": [{ "name": "date", "type": "string" }, { "name": "timestamp", "type": "long" }, { "name": "symbol", "type": ["null", "string"], "default": null }, </pre>	<pre>{ "type": "record", "name": "RETAIL_EQUITY_FLOW", "namespace": "com.nasdaq.rad.urefsentiment.output.minute.flow", "fields": [{ "date": 2026-07-26, "timestamp": 14:27, "symbol": NVDA, "sector": Electronics & IT, "volume_buy": 1400, "volume_sell": 1100 }]</pre>

```
"name": "sector",
"type": ["null", "string"],
"default": null
},
{
"name": "volume_buy",
"type": "double"
}
{
"name": "volume_sell",
"type": "double"
}
```

Use Cases

- Monitor retail investor sentiment
- Quantitative trading models
- Market surveillance and intelligence
- Event-driven analysis
- Retail participation monitoring
- Sector sentiment analysis
- Portfolio risk management

Appendix A – Document Revision History

- **NREP Version 1.0** **Aug 3, 2026**
Version 1.0 launched.