

InvestIQ API Documentation

Overview

The InvestIQ API enables developers to access financial data, portfolio management features, and AI-powered investment insights. This documentation covers the essential endpoints and integration methods.

Base URL

`https://api.investiq.com/v1`

Authentication

All API requests require an API key in the request header:

Authorization: Bearer YOUR_API_KEY

API keys can be generated in your InvestIQ dashboard under Settings > API Access.

Core Endpoints

Stock Data

Get Stock Quote

GET `/stocks/{symbol}/quote`

Returns current price and quote information for a specific stock.

Example Response:

```
{  
  "symbol": "AAPL",
```

```
"price": 175.42,  
"change": 2.35,  
"percentChange": 1.36  
}
```

Get Historical Data

GET /stocks/{symbol}/history

Returns historical price data with parameters for timeframe and interval.

Portfolio Management

Get Portfolio

GET /portfolio

Returns the user's portfolio holdings and performance data.

Add Portfolio Position

POST /portfolio/positions

Adds a new position to the user's portfolio.

Update Portfolio Position

PUT /portfolio/positions/{positionId}

Updates an existing position's shares or average cost.

Remove Portfolio Position

DELETE /portfolio/positions/{positionId}

Removes a position from the portfolio.

Market Data

Get Market News

GET /market/news

Returns latest market news with optional category filtering.

Get IPO Calendar

GET /market/ipo-calendar

Returns upcoming IPO information.

Machine Learning Endpoints

Get Stock Recommendations

GET /ai/recommendations

Returns AI-generated stock recommendations based on the user's profile and risk tolerance.

Example Response:

```
{  
  "recommendations": [  
    {  
      "symbol": "AAPL",  
      "name": "Apple Inc.",  
      "recommendation": "Buy",  
      "confidenceScore": 0.85,  
    }  
  ]  
}
```

```
    "rationale": "Strong product pipeline and services growth momentum"
  }
]
}
```

Get Portfolio Analysis

GET /ai/portfolio/analysis

Returns AI-powered analysis of the user's portfolio, including diversification and risk scores.

Get Market Sentiment

GET /ai/market/sentiment

Returns sentiment analysis for the overall market or specific symbols.

Machine Learning Models

InvestIQ's API is powered by two key ML models:

1. **LSTM Model** - Provides time series prediction for stock prices
2. **Fine-tuned GPT-2** - Analyzes market sentiment from financial news

Error Handling

All errors follow a standard format:

```
{
  "error": {
    "code": "invalid_request",
    "message": "The request parameters are invalid.",
  }
}
```

```
"details": "Parameter 'symbol' is required."
}
}
```

Common error codes: `authentication_error`, `rate_limit_exceeded`, `invalid_request`, `not_found`, `server_error`

Client Libraries

Official client libraries are available for:

- JavaScript/TypeScript: `npm install investiq-api`
- Python: `pip install investiq-api`

Sample Code

JavaScript Example

```
// Get portfolio data
const getPortfolio = async () => {
  const response = await fetch('https://api.investiq.com/v1/portfolio', {
    headers: {
      'Authorization': `Bearer ${apiKey}`
    }
  });
  return response.json();
};
```

Python Example

```
# Get stock recommendations
```

```
import requests
```

```
def get_recommendations(api_key, risk_level="medium"):
```

```
    url = "https://api.investiq.com/v1/ai/recommendations"
```

```
    params = {"risk": risk_level}
```

```
    headers = {"Authorization": f"Bearer {api_key}"}
```

```
    response = requests.get(url, params=params, headers=headers)
```

```
    return response.json()
```

The logo for InvestIQ, featuring the word "InvestIQ" in a large, white, sans-serif font. The "Q" is stylized with a yellow-to-white gradient. The logo is set against a background of light blue and white curved shapes.