# **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()