

Stock Monitor

Feature Overview & System Requirements · Developed by T. Boner with support from Claude AI

APP FEATURES

Price Display & Charts

Function	Description
Symbol Entry	Direct entry of stock tickers (e.g. AAPL, NVDA, BTC-USD)
Exchange Auto-Detection	Automatic recognition of exchange suffix (.SW, .DE, .TO etc.)
Company Name Search	Search by company name instead of ticker symbol
Time Frame Selection	11 periods: 1D, 5D, 1M, 3M, 6M, 1Y, 2Y, 5Y, 10Y, Max + Custom (free date selection)
Moving Averages	MA20, MA50, MA200 individually toggleable
Trend Line	Linear regression over the selected time period
Target Price Line	Horizontal line with analyst target price and % distance
Beta & Alpha in Chart	Beta coefficient and Jensen's Alpha directly in the chart
News Button	Latest news from the past 2 days via Yahoo Finance – no API key required. Button lights green when news is available today, checked automatically every 30 minutes
Company & Analyst Info	Key figures: P/E ratio, market cap, 52W high/low, target price
Fullscreen Mode	Single chart expandable to fullscreen (double-click)
Candlestick Mode	Candlestick view in fullscreen (green/red with wick for high/low)
RSI Indicator	Relative Strength Index as separate panel, overbought/oversold zones
Bollinger Bands	Upper/lower band + midline in fullscreen mode
Drawdown	Maximum drawdown as separate panel in fullscreen mode
52W High / Low	Horizontal reference lines for 52-week high (green) and low (red)
Purchase Price Line	Orange dashed line at the level of personal cost basis
Stop-Loss & Target	Personal price limits per stock; alert when breached
Market Hours	Opening hours, pre-/after-market, holidays for 30+ exchanges worldwide
Chart Export	Save as PNG or PDF
Favourites	Quick selection from saved favourite stocks

Multi-Chart View

Function	Description
Layouts	4 / 6 / 8 / 9 / 12 charts simultaneously (Full HD: max. 12); 4K: up to 16 charts

Global Control	Time frame, MA, trend, target, Beta, Alpha for all charts simultaneously
Auto-Refresh	Automatic update every 30s / 1min / 5min
Compact Mode	Optimised display for Full HD (1920x1080)
Save Profile	Chart configurations saved and loaded as .smp profile
Performance Comparison	Bar chart of all active charts compared (incl. 3D version)
Excel Export	Export all charts as Excel file with embedded chart per worksheet

Watchlist

Function	Description
Manage Symbols	Add, remove, favourites quick-select, clear all, save/load as JSON
Performance Bar Chart	Bar chart of all symbols; green/red, hover tooltip with company name, P&L; and GICS sector
GICS Sector Filter	Dropdown filter for all 12 GICS sectors; instant filtering without recalculation
Export	Save results as PDF, Excel (.xlsx) or ODS

Index Comparison

Function	Description
Benchmark Selection	Compare with up to 3 indices: S&P; 500, NASDAQ, DOW, DAX, SMI, FTSE 100, Nikkei etc.
Normalised Display	Starting point = 100% for direct comparison of performance
Freely Selectable Period	Any time period selectable for comparison
Export	Exportable as PDF, Excel (.xlsx) or ODS

Currency Converter

Function	Description
23 Fiat Currencies	USD, EUR, CHF, GBP, JPY, CAD, AUD, CNY, INR, BRL and more
4 Cryptocurrencies	BTC, ETH, XRP, SOL convertible in real time
Real-Time Rates	Live rates via Yahoo Finance
4 Decimal Places	Precise financial display throughout
Last Used	Currency converter remembers the last selected currencies

Market Hours & Holidays

Function	Description
30+ Exchanges Worldwide	NYSE/NASDAQ, SIX, XETRA, LSE, Euronext, Tokyo, Hong Kong, ASX and more
Real-Time Status	Open / Closed / Pre-Market / After-Hours directly in the chart
Local Exchange Time	Exchange time and your local time at a glance
Market Holidays	All holidays for the current year including next opening day
Cryptocurrencies	24/7 – always open

App Settings

Function	Description
Language	German and English – switchable at any time via DE/EN flags in the toolbar
Number Format	CH (1'234'567.89), DE (1.234.567,89), US (1,234,567.89) – globally effective
Date Format	EU (DD.MM.YYYY), ISO (YYYY-MM-DD), US (MM/DD/YYYY) – globally effective
Save Configuration	Save current chart configuration as .smp profile
Load Configuration	Load .smp profile – also usable on another PC
Auto-Save	Automatic saving of session on exit
Help Dialog	Complete user manual with table of contents, search function and 30+ chapters
No Telemetry	No tracking, no analytics, no advertising – all data stays local

PORTFOLIO FEATURES

Portfolio Management

Function	Description
Manage Positions	Add, top up, partial sell, delete positions
Automatic Price Data	All prices updated automatically via Yahoo Finance – no manual maintenance
Swissquote Import	CSV import from Swissquote with automatic FIFO cost calculation
Generic CSV Import	Supports 8 bank formats: DeGiro, Postbank, ZKB, Comdirect, Flatex, Interactive Brokers, Trading 212 etc.
Stocks, ETFs & Crypto	Separate display with dedicated section and separator
Commodities & Precious Metals	Gold, silver, oil and other commodities manageable in portfolio
Currency Conversion	Automatic FX conversion; display currency switchable: USD, CHF, EUR
Transaction History	All purchases per stock: date, shares, purchase price, value and currency
Perf. Contribution %	Each position's share of total performance; colour-coded, sortable
Sector Contribution %	Cumulative perf. contribution of all positions in the same GICS sector
Triple Summary	Total Stocks/ETFs Crypto as summary row

Portfolio Notes

■ **New: New in v5.2.0: Encrypted journal directly in the portfolio**

Function	Description
■ Notes Button	Direct access to the notebook from the portfolio overview
Portfolio-Specific	Notes belong to the respective portfolio – switch automatically when changing portfolios
Timestamps	Each entry automatically receives date and time
Chronological List	Newest entries appear at top; individual entries deletable
Export as Text	Export all notes as a readable .txt file

Export as PDF	Formatted PDF with all notes including timestamps
AES-256-GCM	Notes are stored encrypted inside the .smpf file

Portfolio Charts

Function	Description
Pie Chart – Allocation	Each stock's share of total portfolio with hover tooltips
Bar Chart – Performance	Performance % per stock with absolute P&L; value
Sector Distribution	GICS sectors with company listing per segment
Sector Performance	Performance bar chart per sector: return % per GICS sector
Regional World Map	Interactive Leaflet.js world map; marker size shows weighting per country

Portfolio Metrics

Function	Description
Alpha Analysis	Jensen's Alpha: Total / Stocks / Crypto with period selection
Beta Analysis	Portfolio Beta vs. S&P; 500: Total / Stocks / Crypto
Sharpe Ratio	Return per unit of risk: Total / Stocks / Crypto
Portfolio Performance TWR/MWR	Time-Weighted Return and Money-Weighted Return compared
Monte Carlo Simulation	Probabilistic price forecast via Geometric Brownian Motion; 10,000 simulations, confidence intervals 10/25/50/75/90%
Excess CAPE Yield (ECY)	Valuation indicator: CAPE yield minus 10Y bond yield – traffic light rating
Period Selection	1M / 3M / 6M / 1Y / 2Y / 5Y / YTD / Since Portfolio Start

Portfolio Balance & AI-Balance

Function	Description
Rebalancing Suggestion	Buy/sell recommendations for optimal weighting based on historical performance
Targeted Rebalancing	Filter by GICS sector or currency; calculation of required buys/sells
AI-Balance	Score weighted with analyst consensus (Yahoo Finance) & news sentiment of the last 30 days
Weighting Slider	Adjustable: historical performance vs. AI signal (recommended: 60% / 40%)
Without Crypto	Rebalancing for stocks/ETFs only possible (crypto can be hidden)
Save as Portfolio	Save calculated target portfolio directly as new encrypted portfolio
Portfolio Comparison	Compare up to 4 portfolios graphically: bar and line chart with zoom
Metrics Comparison	Alpha, Beta, Sharpe Ratio and performance live in zoom area per portfolio

AI Portfolio Analysis

Function	Description
Google Gemini AI	AI-powered comprehensive portfolio analysis with Google Gemini AI
Strengths & Weaknesses	Automatic identification of portfolio strengths and risks

Diversification	Assessment of sector distribution and concentration risks
Market Environment	Assessment of current market conditions and impact on the portfolio
Recommendations	Concrete suggestions for portfolio optimisation
API Key	Requires a Google Gemini API key (available for free)

Dividends

Function	Description
Dividend Calendar	Overview of all upcoming ex-dividend dates in the portfolio
Dividend History	12-bar annual history per stock with current year (hatched) and CAGR label
Dividend Details	Amount per payment, frequency, dividend yield and next ex-date
Annual Projection	Automatic projection of total dividends for the current year

Tax Module

Function	Description
Switzerland	DA-1 securities schedule with canton selection
Germany	Anlage KAP with federal state selection
Austria	E1kv certificate with tax office region
United Kingdom	Schedule B / SA108
USA	Form 1040 / 1042-S with state selection, NIIT and wash-sale warning
PDF Export	Automatically completed tax forms as PDF
AES-256-GCM	Tax module data stored encrypted – same standard as portfolio

Encrypted Portfolio (.smpf)

Function	Description
File Format .smpf	Stock Monitor Portfolio File – portable encrypted format
AES-256-GCM	Military-grade encryption with individual password per file
PBKDF2 (600,000 Iter.)	Password hashing per OWASP recommendation 2024
Portable	Open files on another PC, change password
Multiple Portfolios	Each portfolio as separate file with its own password
Demo Portfolio	Pre-loaded demo portfolio (password: Stock-Monitor 5.0)

EXPORT FUNCTIONS

Export – available in Charts, Portfolio, Watchlist, Metrics, Monte Carlo and Tax Module

Function	Description
PNG	Save chart as image
PDF	Export charts and portfolio data as PDF (ReportLab)

Excel (.xlsx)	Portfolio overview or metrics with embedded chart (openpyxl)
ODS	OpenDocument Spreadsheet – compatible with LibreOffice / OpenOffice (odfpy)

SYSTEM REQUIREMENTS

Component	Minimum	Recommended
Operating System	Linux (RPM), Windows 10 64-bit	Fedora 38+ / Windows 11
Processor	Dual-Core CPU, 1.5 GHz	Quad-Core CPU, 2.5 GHz or faster
Memory	4 GB RAM	8 GB RAM or more
Graphics / Display	Full HD (1920x1080)	4K (3840x2160) for optimal display
Internet Connection	Required (Yahoo Finance)	Stable broadband (min. 10 Mbit/s)
Disk Space Linux	700 MB free	1 GB (incl. cache & portfolios)
Disk Space Windows	700 MB free	1 GB (incl. cache & portfolios)
Screen Resolution	1366x768 (limited)	1920x1080 or higher