

Monthly Tech Megatrend Market Report

January 2024

HANetf & GinsGlobal
 HAN-GINS Tech Megatrend Equal Weight UCITS ETF
 ITEK
 59bps
 IE00BDDRF700
 Product Inception Date: 05/10/2018

For Professional Clients Only. Capital at risk.

All data as of 31/12/2023

This report was written by, and is the opinion of, the ITEK index providers GinsGlobal.

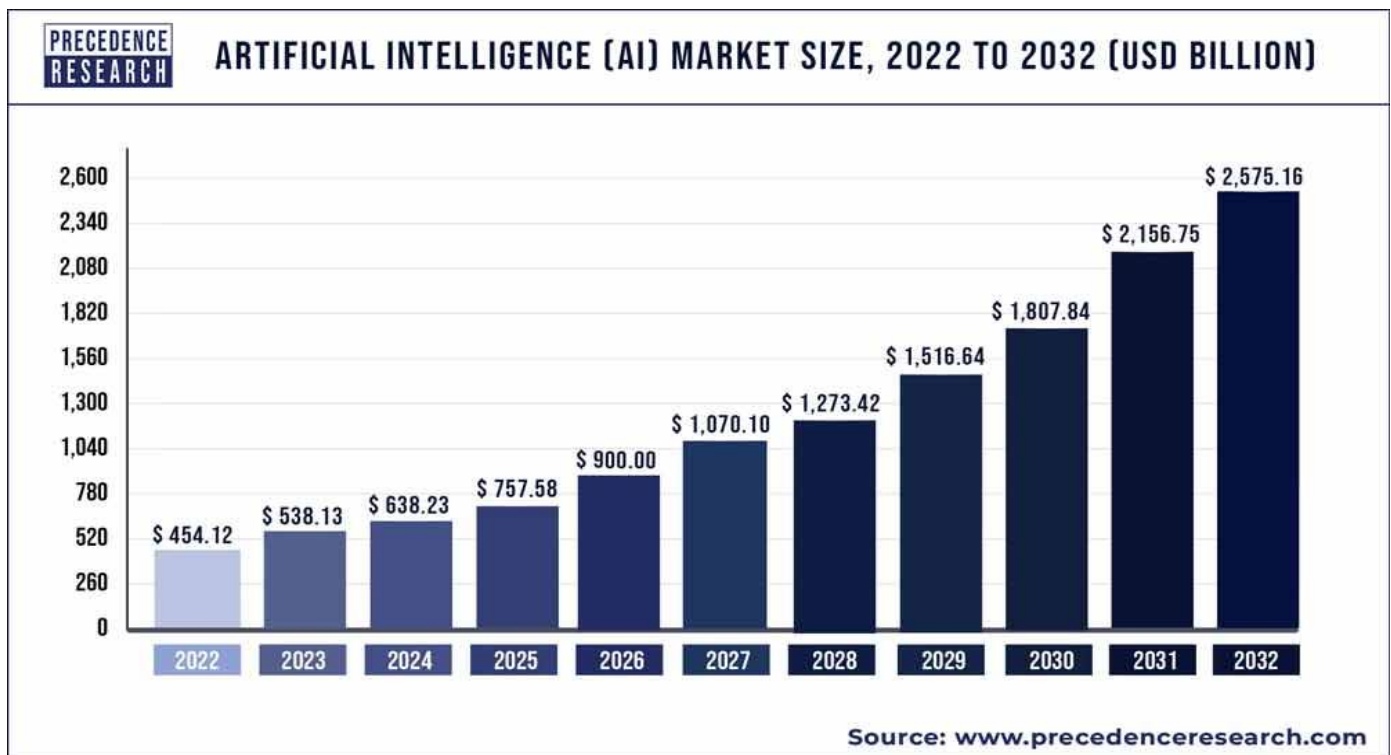
Tech Megatrends ETF Key Takeaways

- ITEK gained 12.2% in December and 45.7% in 2023 – could be well positioned for broader tech rally in 2024.
- Benefits as global digital convergence increases – large M&A deals likely in 2024.
- Social Media, Cloud, AI, Cybersecurity, EVs, Robotics, Streaming all interlinked – boosting usage & deals.
- Subthemes in 2023: Blockchain 19.4%, Robotics & Automation 6.8%, Genomics -0.6%, Cyber Security 5.6%, Future Cars 2.3%, Digital Entertainment 4.9%, Cloud Computing 5.0%, Social Media 3.3%.
- December also boosted by AI, Blockchain, Robotics, Cybersecurity and Social Media.
- Much lower P/E ratio, price/book, and price/sales – versus Nasdaq.
- Top holdings equal weighted – so far less concentrated than Nasdaq and most tech funds in FAANGS.
- Global mix: US 60.6%, China 12.5%, Japan 7.1%, Germany 3.6%, Canada, 3.4% and Australia 3.4%.
- Unlike almost 100% US centric Nasdaq and other tech indices/funds.
- Top 15 leaders for each megatrend subtheme – all established firms.
- Top 5 holdings less than 8% weight; top 10 under 15%. Nasdaq approaches 35% and 50% respectively.
- Mega-cap weight under 7% (Nasdaq 47%).
- ITEK globally well diversified – underweight FAANGS and Magnificent 7.
- Equal weight across 8 subthemes (12.5% per theme; 120 total holdings, 15 per subtheme).
- ITEK broader than GICS classification – includes EVs, Gaming/Streaming, Social Media (excluded by tech Indices).

Source of all data: Gins Global / Bloomberg as of 31/12/2023. Additional sources available upon request. Please note that all performance figures are showing net data. Past performance is not indicative of future performance and when you invest in ETFs, your capital is at risk.

Macro Outlook

- AI seeing huge spending across megatrends - boosting big tech values and cloud providers.
- Over \$2tn spending in AI expected within decade. More M&As expected.
- Likely Fed rate cuts to lower US inflation – tailwind for megatrend holdings.
- Tech enjoying positive rerating – may see broader Tech rally beyond FAANGS, Magnificent 7 into 2024.
- Blockchain rerating as tokenization ledger adoption expected to increase in financial services.
- Low P/Es – attractive valuations. Quality Megatrend holdings amongst lowest P/Es in years.
- Convergence around Gaming, Cloud, Social Media, Cybersecurity – benefiting from WFH trends.
- Fast adoption of OpenAI - ChatGPT & BARD AI – boosting Cloud usage.
- Online Gaming dominated by mobile – boosting Digital Entertainment/Videos (see chart).
- Social Media boosted via gaming and video streaming to mobile (expected to double in 3yrs).
- US Chips Act and \$1tn Infrastructure Bill boosts rollout of EV Charging Stations and onshoring IT trend.
- EVs 10% of Global New Cars Sales in 2022. US to hit 12%+ within 2yrs with big subsidies.



For illustrative purposes only. Source: Precedence Research, 2022. Chart displays expected data.

Subtheme Returns - December

Contribution	Contribution (%)	Average Return (%)	Average Weight (%)
Blockchain	7.0%	89.7%	17.3%
Robotics & Automation	1.0%	5.7%	12.9%
Genomics	0.8%	7.9%	10.9%
Cyber Security	1.3%	8.9%	13.6%
Future Cars	0.9%	8.1%	10.1%
Digital Entertainment	0.0%	-1.5%	11.8%
Cloud Computing	0.2%	1.1%	11.5%
Social Media	1.0%	7.3%	12.3%

Source of all data: Solactive. Past performance is no guarantee of future performance.

Largest Contributors - December

HOLDINGS	Index Category	Contribution (%)	Return (%)	Average Weight (%)
BITFARMS LTD/CANADA	Blockchain	0.92%	96%	1.54%
CLEANSARK INC	Blockchain	0.83%	77%	1.68%
MARATHON DIGITAL HOLDINGS INC	Blockchain	0.78%	96%	1.27%
BIT DIGITAL INC	Blockchain	0.60%	64%	1.20%
COINBASE GLOBAL INC -CLASS A	Blockchain	0.53%	39%	1.55%
TERAWULF INC	Blockchain	0.51%	107%	0.73%
BAKKT HOLDINGS INC	Blockchain	0.45%	49%	1.09%
SENTINELONE INC	Cyber Security	0.43%	44%	1.20%
IRIS ENERGY LTD	Blockchain	0.39%	45%	1.06%
GALAXY DIGITAL HOLDINGS LTD	Blockchain	0.38%	25%	1.55%
CIPHER MINING INC	Blockchain	0.37%	49%	0.84%
HIVE BLOCKCHAIN TECHNOLOGIES	Blockchain	0.34%	43%	0.91%
APPLIED BLOCKCHAIN INC	Blockchain	0.29%	44%	0.84%
HUT 8 MINING CORP	Blockchain	0.27%	580%	0.77%
SNAP INC	Social Media	0.25%	22%	1.23%
RIVIAN AUTOMOTIVE INC	Future Cars	0.25%	40%	0.74%
OKTA INC	Cyber Security	0.24%	35%	0.77%
RIOT BLOCKCHAIN INC	Blockchain	0.22%	23%	1.11%
ROBLOX CORP	Digital Entertainment	0.19%	16%	1.21%

ILLUMINA INC	Genomics	0.19%	37%	0.61%
HEXAGON AB CLASS B	Robotics & Automation	0.19%	15%	1.00%
BIO-TECHNE CORP	Genomics	0.16%	23%	0.73%
NIO INC - ADR	Future Cars	0.15%	25%	0.62%
INTEL CORP	Robotics & Automation	0.14%	12%	1.03%
ZSCALER INC	Cyber Security	0.13%	12%	1.08%

Source of all data: Solactive. Past performance is no guarantee of future performance.

Tech Megatrends ETF Performance

As of 31.12.2023

	1M	3M	6M	YTD	12M	2Y	3Y	SI
HAN-GINS Tech Megatrends Equal Weight UCITS ETF	12.15%	20.06%	9.28%	45.71%	45.71%	-19.60%	-12.71%	61.86%
<i>Solactive Innovative Technologies Index (NTR)</i>	12.22%	20.39%	9.71%	47.02%	47.02%	-19.27%	-12.02%	65.10%

Please note that all performance figures are showing net data. Source: Bloomberg / HANetf. Data as of 31/12/2023
Performance before inception is based on back tested data. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. Past performance for the index is in USD. Past performance is not an indicator for future results and should not be the sole factor of consideration when selecting a product. Investors should read the prospectus of the Issuer ("Prospectus") before investing and should refer to the section of the Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in this product. When you invest in ETFs and ETCs, your capital is at risk.

* The SFDR classifications for the funds are documented in their respective supplements and approved by the Central Bank of Ireland. The supplement for each fund can be found on their respective product page.

Product Details

HAN-GINS Tech Megatrend Equal Weight UCITS ETF (ITEK) is a UCITS compliant ETF domiciled in Ireland. ITEK tracks the Solactive Innovative Technologies Index (Net Total Return), an index of leading companies that are driving innovation in sectors including Robotics & Automation, Cloud Computing & Big Data, Cyber Security, Future Cars, Genomics, Social Media, Blockchain and Augmented & Virtual Reality.

The Solactive Index is managed according to a published, rules-based methodology. It is designed to measure the performance of an investable universe of publicly-traded companies that are involved in innovative and disruptive technological trends across a broad range of industries mentioned. To be included, companies must derive a majority of revenue from one of these themes.

Please remember that the value of your investment may go down as well as up and past performance is no indication of future performance.

Visit the [ITEK Fund Page](#) for more information.

Exchange	BBG Code	RIC	ISIN	Valoren	SEDOL	Currency	TER
London Stock Exchange	ITEK LN	ITEK.L	IE00BDDRF700	-	BYVJ8Y3	USD	0.59%
London Stock Exchange	ITEP LN	ITEP.L	IE00BDDRF700	-	BYVJ9D9	GBP	0.59%
Borsa Italiana	ITEK IM	ITEK.MI	IE00BDDRF700	-	BFX1C86	EUR	0.59%
Deutsche Boerse Xetra	T3KE GY	T3KE.DE	IE00BDDRF700	-	BFX38M8	EUR	0.59%
SIX Swiss Exchange	ITEK SW	ITEK.S	IE00BDDRF700	43915667	BMYC3Q2	CHF	0.59%



Anthony Ginsberg, GinsGlobal Index Funds

Anthony Ginsberg is the co-creator of the HAN-GINS Tech Megatrend UCITS ETF (ITEK), enabling investors to gain exposure to the eight leading subthemes driving the Fourth Industrial Revolution, across Developed and Emerging markets. ITEK tracks a rules-based index that equally weights these eight subthemes, including cybersecurity, social media, future cars to digital entertainment, gene editing and robotics.

Anthony Ginsberg is the Managing Director of GinsGlobal Investment Management, a global asset management company offering a broad range of innovative index-linked products, for both retail and institutional investors. GinsGlobal designs index products for a number of leading financial institutions, including global insurers, banks and asset managers. GinsGlobal was founded in 2000 and has operations in North America, Africa, Middle East and Asia-Pacific.

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 - the carbon securities ETCs under the terms in the base prospectus approved by the UK Financial Conduct Authority (“FCA”) and the relevant final terms of the carbon securities (together, “FCA Carbon ETC Prospectus”); and

- iii. the carbon securities ETCs under the terms in the base prospectus approved by the Central Bank of Ireland ("CBI") and the final terms of the carbon securities (together, "CBI Carbon ETC Prospectus").

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3. ETC Issuance GmbH, a limited liability company incorporated under the laws of the Federal Republic of Germany, issuing under the terms in the Base Prospectus approved by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin") and the final terms ("Cryptocurrency Prospectus") is the issuer of the ETC Group ETCs. Investors should read the latest version of the Cryptocurrency Prospectus before investing and should refer to the section of the Cryptocurrency Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in the ETCs contained in the Cryptocurrency Prospectus. Any decision to invest should be based on the information contained in the Cryptocurrency Prospectus.

The ETF Prospectus, Metals ETC Prospectus, FCA Carbon ETC Prospectus, CBI Carbon ETC Prospectus and Cryptocurrency Prospectus can all be downloaded from www.hanetf.com.

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