

Monthly Tech Megatrend Market Report

December 2022

HANetf & GinsGlobal

HAN-GINS Tech Megatrends UCITS ETF

ITEK

59bps

IE00BDDRF700

Product Inception Date: 05/10/2018

For Professional Clients Only. Capital at risk.

All data as of 30/11/22

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

Key Takeaways¹

- ITEK gained 2.0% this month - equal weight (112 holdings) helped.
- Broad exposure to fastest Growing Megatrends.
- Underweight FAANGS; Nasdaq 7X more MegaCap exposure.
- Broader disruptive tech holdings than traditional Tech Fund – 8 equal weight subthemes.
- **Best Subtheme contributors:** Genomics (6.1%), Future Cars (7.4%), Cybersecurity (3.2%) & Blockchain (2.5%).
- ITEK holdings have far lower overall P/E, Price/Book and Price/Sales ratios versus Nasdaq.
- Hold only the most established leaders in each of our 8 subthemes (Top 15 market cap).
- Ensures focus on profitable, quality companies.
- End November P/E (TTM) 22.75. Just 1yr ago 2021 was close to 30. (Morningstar)
- Similarly Price/Book (TTM) now 2.56. Almost double 1yr ago 2021 (Morningstar)
- Price/Sales (TTM) = 3.35; high was 6.22 1yr ago (Morningstar)
- ITEK top holdings far less concentrated than most Tech funds – Top 5 holdings (6.6%); Top 10 (12.6%).
- ITEK holds top 15 established players in each subtheme. (all profitable)
- ITEK broader than GICS classification – so includes EVs, Online Gaming & Streaming (excluded by Tech Indices).
- **Global mix:** US 63.4%, China 10.6%, Japan 6.1%, South Korea 2.8% & Sweden 2.9%. (Nasdaq 100% US only.)

Macro Outlook

- US Inflation has peaked and slower Fed rate rises are positive for quality Tech & other Growth stocks in 2023.
- Video Streaming & Online Gaming growth, to propel Digital Entertainment theme in 2023.
- Onshoring away from China = positive for Robotics & Factory Automation in US & Europe
- US inflation lower in November – helpful for Megatrend holdings to be revalued higher.
- Big Tech will benefit from weaker US\$ - likely going forward as US inflation subsides.
- Indiscriminate Tech selloff hurt in 2022 – but quality holdings should be rewarded in 2023.
- Electric Vehicles Market share to double in the US over next 3 years.
- Adoption rates boosted by 2030 California & 2035 US Federal Government rules ban on traditional cars.
- EV growth benefiting from high petrol prices & continued Ukraine war.

¹ Sources available upon request.

- Genomics (Gene Editing & CRISPR) - global market to reach almost \$100bn by 2030 at a CAGR of 16.4%.
- Gaming Company acquisitions rising - fast growing space;
- Gaming Revenues likely to double in next 4 years. Almost 5X larger than Hollywood box office.
- Largest Tech deal in 2022 (Microsoft-Activision), based on Gaming, Cloud & Mobile convergence. (See Chart-Social Gaming)
- Social Media platforms have revenue opportunities beyond digital ads - gaming a major new area.
- Cheaper Tech stocks – expect more M&A activity in 2022-23 due to lower PE multiples.

Source of all data: Gins Global / Bloomberg as of 30/11/2022. **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.

Subtheme Returns - November

Contribution	Total Return (%)	% Average Weight	% Performance of category
Blockchain	0.31	12.42	2.50
Robotics & Automation	-0.18	13.18	-1.37
Genomics	0.92	15.19	6.06
Cyber Security	0.42	13.11	3.20
Future Cars	0.97	13.16	7.37
Digital Entertainment	-0.01	13.14	-0.08
Cloud Computing	-0.08	13.13	-0.61
Social Media	-0.35	6.67	-5.25

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

Largest Contributors - November

HOLDINGS	Index Category	Average Weight (%)	Total Return (%)	Contribution to Return (%)
KUAISHOU TECHNOLOGY	Cloud Computing	0.68	76.13	0.36
LI AUTO INC-CLASS A	Digital Entertainment	0.59	46.63	0.22
GDS HOLDINGS LTD-CL A	Cyber Security	0.43	43.38	0.15
BAIDU INC - SPON ADR	Robotics & Automation	0.62	41.83	0.22
WEIBO CORP-SPON ADR	Digital Entertainment	0.70	40.81	0.24
KRAFTON INC	Digital Entertainment	0.83	38.35	0.26
ALIBABA GROUP HOLDING	Robotics & Automation	0.76	37.72	0.25
BAIDU INC-CLASS A	Digital Entertainment	0.66	36.10	0.20
INFINEON TECHNOLOGIES	Social Media	1.22	33.31	0.33
MEDIATEK INC	Future Cars	0.96	30.10	0.25

ADVANCED MICRO DEVICES	Blockchain	0.81	29.25	0.21
MICROCHIP TECHNOLOGY	Digital Entertainment	1.08	28.85	0.28
NETEASE INC	Blockchain	0.71	28.45	0.17
META PLATFORMS INC	Future Cars	0.69	26.77	0.17
NVIDIA CORP	Future Cars	1.00	25.41	0.23
NEXON CO LTD	Cyber Security	0.92	23.45	0.19
HANSOH PHARMACEUTICAL	Cyber Security	0.89	22.51	0.17
EQUINIX INC	Blockchain	0.96	22.50	0.20

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

Tech Megatrends Performance

As of 30.11.22

	1M	3M	6M	YTD	12M	2Y	3Y	SI
HAN-GINS Tech Megatrends UCITS ETF	1.99%	-8.29%	-14.56%	-40.60%	-44.40%	-30.58%	7.27%	19.59%
<i>Solactive Innovative Technologies Index (NTR)</i>	2.04%	-8.25%	-14.44%	-40.90%	-44.66%	-30.63%	7.69%	20.87%

Please note that all performance figures are showing net data. Source: Bloomberg / HANetf. Data as of 30/11/2022. 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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- ii. 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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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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