



VettaFi AI Photonics Index

AIPHTN

Table of Contents

Introduction	3
Index Objective	3
Highlights	3
Dates	3
Supporting Documents	3
Eligibility Criteria and Index Construction	4
Universe	4
Eligibility.....	4
Index Construction.....	5
Constituent Selection.....	5
Constituent Weightings & Constraints	5
Index Maintenance	5
Rebalancing and Reconstitution	5
Corporate Actions	5
Index Information	5
Index Calculation.....	6
Index Governance	6
Index Policies	6
Contact Information.....	6
Appendix	7

Introduction

Index Objective

The VettaFi AI Photonics Index measures the performance of companies engaged in AI Photonics. AI Photonics is the integration of light-based technologies (photonics) into artificial intelligence hardware to transmit data and perform calculations. By replacing traditional electrical copper connections with photons, AI Photonics overcome the severe bandwidth, latency, and power consumption bottlenecks that currently limit the scaling of massive AI data centers.

Highlights

The index is composed of the top 25 companies by engagement and market cap classified within the AI Photonics six-layer architecture.

Dates

Reference Dates: The last trade business day of the month prior to the rebalance month.

Weight Date: Six business days prior to the rebalance date.

Reconstitution Dates: Indexes are reconstituted quarterly on the third Wednesday of January, April, July, and October.

Rebalance Dates: Indexes are rebalanced quarterly on the third Wednesday of January, April, July, and October.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein.

The list of the main supplemental documents for this methodology can be found in the Methodologies and Governance tabs on the [Index Resources](#) page as follows:

Supporting Documents
Index Maintenance Policy
Index Governance
Index Policies
Methodology Policies
Glossary
Index Change and Consultation Policy

Eligibility Criteria and Index Construction

Universe

The index universe consists of global equity securities listed on exchanges located in the countries listed in the appendix that can be classified in the AI Photonics six-layer architecture:

Layer 1: The Raw Chemistry & Materials (The Soil): The foundational layer where exotic chemical compounds (like Indium Phosphide), specialized wafers, and next-generation polymers are engineered, providing the physical canvas because standard silicon cannot efficiently emit light.

Layer 2: The Raw Light & Micro-Optics (The Bulbs & Lenses): The physical hardware that generates, steers, and catches the light. This includes the bare laser diodes, the photodetectors, and the microscopic glass and plastic lenses that perfectly focus the beam into the fiber.

Layer 3: The Translators & Optical Intelligence (The Brains): The specialized semiconductor chips that bridge the electrical and optical worlds. This includes analog drivers to fire the lasers and complex Optical DSPs (Digital Signal Processors) that act as massive noise-canceling headphones to clean up the high-speed data signals.

Layer 4: Final Module Integration & Assembly (The Builders): The precise manufacturing and assembly stage where the chips, lasers, and lenses are robotically combined into the final, ready-to-use pluggable transceiver modules or advanced Co-Packaged Optics (CPO) interposers.

Layer 5: The Physical Highway & Network (The Infrastructure): The physical routing systems that connect the GPUs across the data center. This includes the massive Ethernet switches, the miles of high-density glass fiber-optic cabling, the physical connectors, and the long-haul optical systems linking separate buildings together.

Layer 6: The Toolmakers & Quality Control (The Inspectors): The "picks and shovels" layer that provides the multi-million-dollar lab testing equipment, validation platforms, and precision alignment tools required to ensure these ultra-fast components perform flawlessly before they are deployed by hyperscalers.

Eligibility

Companies must be principally or materially engaged:

Principally Engaged - At least 50% of annual revenue derived from the AI photonics architecture. Pre-revenue companies whose business model is completely focused on the AI/Photonics Ecosystem are also considered principally engaged.

Materially Engaged - Between 10% to 50% derived from the AI photonics architecture.

Chinese and Taiwanese companies are only eligible for inclusion if they are principally engaged

Additionally, companies must meet the following criteria:

- Market Cap minimum of 100 Million USD/ 80 million USD for current constituents
- Minimum 20% Free Float
- 3-month Average Daily Traded Value (ADTV) of 1 Million USD.
- Companies must have at least 22 days of trading in the last 3 months.

Index Construction

Constituent Selection

Eligible companies are ranked by engagement classification (principally or materially engaged) and within engagement classification by full company market cap. The top 25 companies are selected.

Constituent Weightings & Constraints

The index implements the following weighting scheme that separately weights principally and materially engaged companies.

Principally Engaged – minimum 80% of the index:

- Float modified market cap weighted with a max weight of 10% and a minimum weight of 2% per constituent

Materially Engaged:

- Float modified market cap weighted with a max weight of 4% and a minimum weight of 0.3% per constituent

Securities with a weight greater than 5% are capped at an aggregate of 45%.

Index Maintenance

Rebalancing and Reconstitution

The Indexes are rebalanced on the “Rebalance Date” and additionally reconstituted on the “Reconstitution Date”. Pricing used in share weights used for reconstitutions are as of the “Weight Date”. Share weights for the rebalanced Indexes are computed as of the “Weight Date”. Changes to the Indexes related to the rebalances are as of the “Rebalance Date”. Additions are only made on reconstitution dates.

Corporate Actions

Please refer to the Index Maintenance Policy document for information on Corporate Action processing.

Index Information

Index history availability, base dates and base values are shown in the table below.

Index	Price Index	Total Return Index	Base Date	Base Value
VettaFi AI Photonics Index	AIPHTN	AIPHTNG	01/15/2021	1000

Methodology Updates and Changes

Date	Version	Previous	New
Jul 2026	1.0.0		Initial Version

Index Calculation

Please refer to the Index Maintenance Policy document for information on index calculations.

Index Governance

The index is governed and managed by a VettaFi Index Committee for the purpose of meeting the goals of the index. For more information, please refer to the Index Governance document.

Index Policies

Please refer to the Index Policies document for information regarding Announcements, Holiday Schedules, Unexpected Exchange Closures, and Recalculation Policy.

Contact Information

For any questions regarding an index, please contact: index.production@vettafi.com

Appendix

Country of Exchange:

Australia	Japan
Austria	Netherlands
Belgium	New Zealand
Canada	Norway
Czech Republic	Portugal
Denmark	Singapore
Finland	South Africa
France	South Korea
Germany	Spain
Greece	Sweden
Hong Kong	Switzerland
Ireland	United Kingdom
Israel	United States
Italy	China
Taiwan	