

# Scientific Infra & Private Assets

SIPA PRODUCT CERTIFICATION · REQUIRED READING

## privateAlpha — Product Factsheet

Fund & GP Performance Analytics: Inputs, Outputs, League Tables & Use Cases

| PRODUCT      | MARKET                             | PREREQUISITE | PRIMARY AUDIENCE                   |
|--------------|------------------------------------|--------------|------------------------------------|
| privateAlpha | Private-fund performance analytics | None         | Client-facing and analytical staff |

### How to use this factsheet

This is the required reading for the privateAlpha product certificate. privateAlpha is different in kind from the three data products: it is an analytics platform that measures the performance of private funds and their managers using SIPA's indices as the market reference. This factsheet specifies precisely what it does, the inputs it requires, the outputs it produces, its league-table coverage and fields, its methodology and its use cases — with fund selection as the dominant application. Figures are stated as at SIPA's 2024–2025 privateAlpha materials.

#### SECTION 1

### What the product is

privateAlpha answers a question IRR and peer quartiles cannot: how much of a fund's return came from the manager, and how much from the market? It decomposes a fund's internal rate of return into a market-return (beta) component and an alpha component, then splits the alpha into allocation alpha (from tilting toward segments that outperform the market) and pure, or selection, alpha (from choosing, structuring and timing individual investments). The engine is the Direct Alpha method applied against a Private Market Equivalent — a representative privateMetrics or infraMetrics index — rather than a public-market proxy.

#### SECTION 2

### Inputs required

- **Fund cash flows and NAV.** Every contribution and distribution with its date, plus the fund's latest NAV (treated as a final flow). Individual and bulk upload are both supported.
- **Fund strategy.** The fund's allocation across PECCS (private equity) or TICCS (infrastructure) segments and geographies, used to build a representative style benchmark — typically taken from the manager or the fund prospectus.
- **Choice of benchmark.** A broad-market index (e.g. private2000 or infra300) and a bespoke style benchmark; the platform tailors the index to the fund's asset class, region and strategy.

**Data source and eligibility.** Fund data come from the LP or the GP — the client decides. Funds enter the league tables only once they have at least three years of data, to avoid ranking funds still in the early “J-curve” phase; because Direct Alpha uses full cash flows and the NAV, many young funds nonetheless show meaningful alpha.

### SECTION 3

## Outputs produced

For any uploaded fund, privateAlpha returns an instant IRR decomposition and full attribution:

- **Market return (beta)** — the part of the IRR explained by the market index.
- **Total alpha** — the fund's annualised excess return over the broad-market index.
- **Allocation alpha** — total alpha minus pure alpha; the return from segment tilts.
- **Pure (selection) alpha** — excess return over the bespoke style benchmark.
- **Alpha-persistence score** — the statistical probability that the GP generates positive alpha on its next fund.
- **Peer ranking** — a performance report ranking the fund by vintage, strategy, size and geography.

### SECTION 4

## League tables and coverage

The platform publishes GP and Fund Alpha League Tables that rank managers on a consistent, directly comparable basis.

| Coverage / feature       | privateAlpha                                                                                          |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| Funds ranked             | 3,000+ buyout funds and 500+ infrastructure funds                                                     |
| Strategy benchmarks      | 200+ buyout indices and 30+ infrastructure indices                                                    |
| League-table fields      | Star rating; style category; alpha rank; average pure alpha; probability of positive alpha; fund beta |
| Attribution (any fund)   | Market return; allocation alpha; pure alpha                                                           |
| Eligibility              | Funds with 3+ years of data                                                                           |
| Custom-benchmark builder | Build a bespoke style benchmark per fund, with up to 20 allocation constraints                        |
| Subscription             | Annual “Pro+” subscription (list price USD 25,000/year)                                               |

### Worked example — reading a GP league-table row

A mega-GP row (managers up to ~USD 345bn AUM) might read: manager X, three-star rating, “Shark” style, alpha rank 1.00, average pure alpha 25.2%, probability of positive alpha 75%, fund beta 0.63. Read together: the manager ranks top of its cohort, has historically added large selection alpha, has an estimated 75% chance of positive alpha on its next fund, and takes less-than-market systematic risk (beta below 1).

By contrast a one-star row — alpha rank 0.91, average pure alpha 9.0%, probability of positive alpha 63.6%, fund beta 1.02 — still adds alpha but with roughly market-level beta and a lower persistence probability. The star rating and style label summarise the numeric attribution; the underlying figures are what an LP interrogates in diligence.

## SECTION 5

### How the product is modelled

privateAlpha turns a fund's cash flows into a market-adjusted performance measure using the Direct Alpha method (Gredil, Griffiths & Stucke, 2023), applied against a Private Market Equivalent — a representative privateMetrics or infraMetrics index — rather than a public-market proxy.

**5.1 Direct Alpha.** Every fund cash flow is “compounded” by the benchmark before any return is computed: each flow is scaled by the index level at the period end divided by the index level on the flow's date.

*Adjusted flow(t) = Cash flow(t) × [ Index(T) / Index(t) ]; Direct Alpha = IRR of the adjusted flows, with the terminal NAV as the final flow.*

Because the index return is now carried inside the cash flows, the internal rate of return of the adjusted flows is the fund's annualised excess return over its market index — a figure directly comparable to an IRR. The decomposition is exact and additive: Market return + Alpha = Fund IRR, with nothing lost. The method makes no assumption that distributions are reinvested in the benchmark and preserves the timing of every flow.

**5.2 Alpha decomposition.** Measured against the broad-market index the excess return is the fund's Total Alpha; measured against a bespoke style benchmark — a weighted combination of PECCS or TICCS segments and geographies mirroring the fund's strategy, built with up to 20 constraints — it is the fund's Pure, or selection, Alpha; and Allocation Alpha is the difference, Total – Pure. Allocation alpha captures value from tilting toward segments that outperform the broad market; pure alpha captures selection, structuring and timing of individual investments.

**5.3 Alpha-persistence model.** Whether a manager repeats positive alpha is scored with a Bayesian Beta-Binomial model. Starting from an informed prior  $\theta \sim \text{Beta}(2, 2)$  (mean 0.5), after observing  $S$  funds with positive alpha and  $F$  without, the posterior is  $\theta | S, F \sim \text{Beta}(2+S, 2+F)$ ; the expected probability of positive alpha on the next fund is  $(2+S)/(4+S+F)$ , with a 95% credible interval read from the Beta quantiles. Because alpha is an excess return over a risk-matched benchmark, it is comparable across vintages, strategies, sizes and geographies. Full technical treatment is in the Advanced reading of the SIPA Knowledge Certification.

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## SECTION 6

### Key use cases

**Fund selection (primary).** privateAlpha is built for manager selection and re-up decisions. By ranking funds and GPs on alpha — comparable across vintages, strategies, sizes and geographies once market and style are controlled for — it lets an LP identify managers with genuine, and ideally persistent, skill rather than managers who merely rode a rising market.

**Performance attribution and monitoring.** For existing holdings, the market / allocation / pure decomposition shows why a fund performed as it did and whether its result depended on skill or on market exposure, supporting ongoing monitoring and board reporting.

**GP due diligence and benchmarking.** The persistence score and style-specific benchmarking let an investor test a manager's track record for repeatability and compare it against the right strategy cohort rather than an ill-fitting public proxy.

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## SECTION 7

### Access

privateAlpha is a subscription platform (annual “Pro+”) that includes the GP and Fund Alpha League Tables, full alpha attribution and persistence scoring, and individual and bulk cash-flow upload with instant IRR decomposition.

### References

#### Sources

Scientific Infra & Private Assets. privateAlpha — fund-manager benefits and subscription materials; GP and Fund Alpha League Tables. 2024–2025. <https://docs.sipametrics.com/docs>

Scientific Infra & Private Assets (2025). Benchmarking private market performance (the Private Market Equivalent and privateAlpha). [https://publishing.sipametrics.com/papers/2025\\_benchmarking\\_private\\_market\\_performance.pdf](https://publishing.sipametrics.com/papers/2025_benchmarking_private_market_performance.pdf)

Gredil, O. R., Griffiths, B. E., & Stucke, R. (2023). Benchmarking private equity: the direct alpha method. *Journal of Corporate Finance*, 81, 102360. <https://doi.org/10.1016/j.jcorpfin.2023.102360>