

September 2023

Steps to Test Your Solar Energy Kit Through VeraSol

Initial Engagement (typically 1 - 4 weeks)

Step 1: Contact VeraSol at testing@verasol.org

Step 2: Fill out the paperwork requested by VeraSol (sent to you via email) and complete a [Master Service Agreement](#) (MSA).

Step 3: Review and approve the test plan and service order sent to you by VeraSol and request a quote and separate test agreement for the lab of your choice in the [VeraSol lab network](#).

Send Samples

Step 4: For Quality Test Method (QTM) testing for certification, VeraSol will coordinate random sampling with an approved sampling agent. QTM samples are typically warehouse-selected. In general, 18 samples out of a stock of 500 are required for QTM testing of pico-products (products $\leq 10 W_p$) and 12 samples out of a stock of 150 are required for SHS kits (products $> 10 W_p$ & $\leq 350 W_p$). The manufacturer mails packaged samples to the test lab.

Test (typically 3-5 months)

Step 5: Direct communication with the test lab is most efficient during testing.

Receive Results

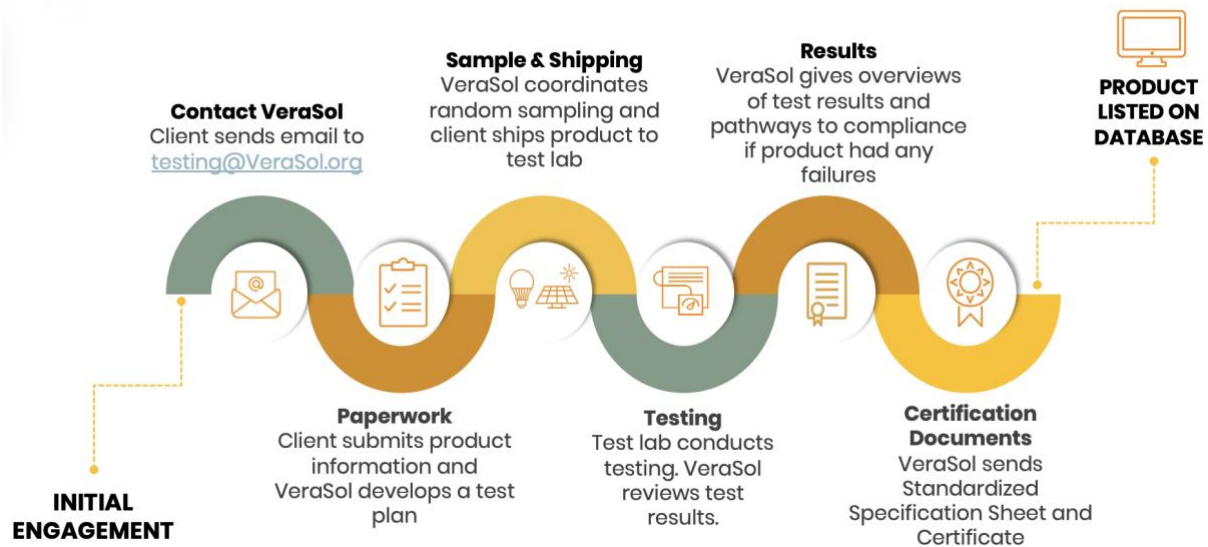
Step 6: Upon completion of testing, VeraSol will send you the test results with an assessment for meeting the requirements in the International Electrotechnical Commission Technical Specification 62257-9-8.

Certification

- If the product meets the Standards, the product will be VeraSol-certified and VeraSol will post a Spec Sheet and Certificate on the [VeraSol website](#).
- If the product does not fully meet the Standards, and the issue(s) can be easily addressed without retesting, the manufacturer the opportunity to make required changes to the packaging or documentation to meet the Quality Standards.
- If the product requires retesting, the company can correct issues and resubmit the product, though partial testing may be possible.
- Test results are valid for two years. After that, a company may renew their test results through renewal testing.



VeraSolSM



Test Method Comparison Table

Test Method	ISM	QTM	MCM	Renewal	AVM
Required to meet/maintain VeraSol Quality Standards	No	Yes	Yes, at VeraSol's Discretion	Yes, required within two years after meeting the Standards	Alternate to QTM (manufacturer must meet certain eligibility criteria)
Random Sampling¹	Not required: manufacturers can send pre-production units directly to lab	Required: sampling from warehouse or retail	Required: sampling from retail	Required: sampling from warehouse or retail	Not required initially: manufacturers can send pre-production units directly to lab Required for follow-up test: sampling from warehouse or retail
Minimum Number of Samples Sent to Test Lab	3	18 (Pico) 12 (SHS)	8 to 18	8	18 (initially) 8 (follow-up MCM)
Samples per Test Aspect	1	6 (Pico), 4 (SHS kits)	2 to 6	2 (6 if aspects have changed)	6 (Pico), 4 (SHS kits) initially 2 (follow-up MCM)
Estimated Testing Duration [months]	1 to 3	4 to 6	3 to 4	3 to 4	4 to 6 (initially) 3 to 4 (follow-up MCM)
ISO 17025 Accreditation	No	Yes	No	Yes	Yes

¹ Sampling guidelines are on VeraSol's website: <https://verasol.org/publications/product-sampling-policy>



VeraSolSM

ISM = Initial Screening Method

- Optional
- Provides feedback to the manufacturer on how the product would likely perform during QTM testing

QTM = Quality Test Method

- Results determine if product meets Quality Standards
- If the product does not meet the Standards after QTM testing, VeraSol will work with the manufacturer to improve the product (additional partial re-testing may be required)

AVM = Accelerated Verification Method

- Optional alternative to QTM
- Consists of a QTM with no random sampling, followed by a 2-sample test with random sampling within six months
- Manufacturer must meet certain eligibility criteria

MCM = Market Check Method

- Performed on VeraSol-certified products at VeraSol's discretion sampled from retail markets or warehouses
- Ensures that the quality and performance of certified products meets or exceed original levels over time
- If product fails initial MCM, the manufacturer can retry QTM test at its own expense within a reasonable timeframe

Renewal Test

- Performed on VeraSol-certified products to maintain VeraSol status
- To be performed within two years after meeting the Quality Standards

Note

When certifying multiple similar products, enquire about our [Similar Products policy](#) and our [Framework for Testing Component Families](#) to potentially save on time and testing costs.