

Nordson® Solar Solutions

Application solutions for production of photovoltaic modules, solar thermal collectors, concentrated solar power, or even building-integrated photovoltaic products



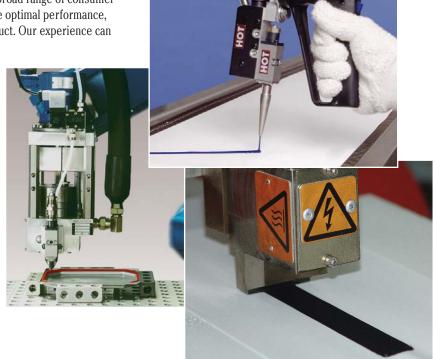
One of the many challenges facing the fast growing and evolving solar energy market is efficiently producing long-lasting, reliable solar PV modules and thermal collectors. Solar products must withstand harsh environmental conditions over an extended period of time with little or no maintenance. Production processes must become quicker and less-expensive without any loss of product performance, particularly durability.

With more than 50 years experience in precision dispensing technology, Nordson has become one of the world leaders. Hot and cold, single- and multi-component materials for manufacturing a broad range of consumer and industrial products are processed to achieve optimal performance, both in production and as part of your final product. Our experience can

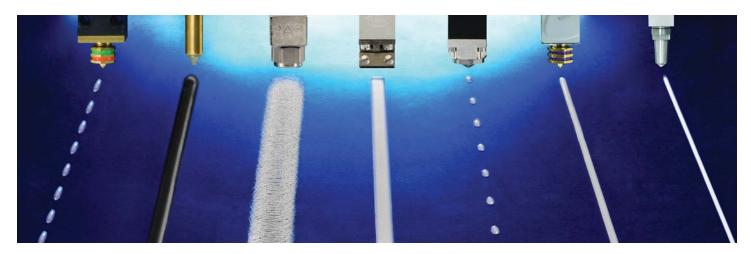
help you become a world leader in delivering consistent, high-quality solar assemblies to your customers.

Nordson application and verification systems help optimize the functional and mechanical properties of a wide range of dispensed materials. These include:

- Hot melt adhesives, such as EVAs
- Butyls
- Cold liquid adhesives
- Polyamides
- Warm and cold silicones
- Sealants
- Moisture-curing materials
- TPS
- Two-component materials



And the list of materials processed continues to grow. These materials come in a variety of forms, so Nordson has melter and unloader systems for everything from small pellets to pillows to solid pails/drums.



There are many applications involved in assembly of photovoltaic (PV) modules, concentrating solar power (CSP) systems, thermal collectors or building-integrated PV (BIPV) systems. Nordson components such as melters, unloaders, controls and applicators help create solutions to produce the various patterns you need. Solid or foamed dispensing can apply beads, tape-like films or spray patterns for assembly, bonding or sealing throughout your production process.

Nordson has systems for manual, semi-automatic or fully-automated production and Nordson systems easily integrate into new or existing production environments.

Nordson technology helps provide:

- controlled, repeatable material dispensing
- lower material consumption
- enhanced product quality
- use of higher-volume, so more cost-effective, material supply units
- maintenance savings
- reduced waste, scrap or rework



Through our years of experience, Nordson has developed a worldwide support network. A locally-available, global team of highly-trained, knowledgeable engineers, service technicians and 24/7 support staff help you develop, install and maintain dispensing solutions for your solar product assembly. Our people are supported by an infrastructure that includes research facilities, test laboratories and parts distribution warehouses in locations throughout Europe, Asia and the Americas.

Please contact Nordson solar solutions today to see how we can help you develop a solution to your assembly challenges.

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For more information, talk with your Nordson solar expert.

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When you expect more.®