



NX Gemini

Introducing the NEXTracker Two-in-Portrait Smart Solar Tracker

The NX Gemini™ two-in-portrait (2P) solar tracker optimizes lifetime value and performance, helping project developers and asset owners get the most from their power plant. Ideally suited for sites with challenging soils, high winds, and irregular boundaries, the ruggedized 2P tracker features a patent-pending distributed drive system for maximum stability in extreme weather, eliminating the need for dampers and producing virtually zero energy losses associated with stowing.

Capitalize with Highest Power Density Solar Tracker

NX Gemini's flexible 2P module configuration allows for the maximum number of modules per foundation, requiring only 60 meters and seven foundation posts to provide support for up to 120 modules on four 1500-volt strings. With the lowest number of foundations per megawatts on the solar tracker market today, NX Gemini helps reduce tracker installation costs on difficult sites.

Pair with TrueCapture and Bifacial for Maximum Performance

The 2P tracker can be equipped with either monofacial or bifacial PV modules and integrated with the entire NEXTracker software ecosystem, including the TrueCapture™ advanced smart control and energy yield enhancement platform. Incorporated into the NX Gemini design is the field-proven innovations found in NX Horizon™, such as independent-row architecture, intelligent control systems and wireless communications.

FEATURES AND BENEFITS

- Industry-leading 2P design with 7 foundations points per 120 module row
- Ideal for challenging soils
- Bifacial-optimized for maximum performance
- Patent-pending distributed drive system for maximum stability in high winds
- TrueCapture ready, gain up to 6% more energy
- Special rotation feature for high velocity module installation

“ The NEXTracker team has always collaborated with us during their product development process, resulting in trackers that are faster to build, compatible for more sites and easier to maintain. NX Gemini is a strong tracker option for sites with challenging topography and geotechnical conditions. ”

George Hershman, President of Swinerton Renewable Energy

GENERAL AND MECHANICAL

Tracking type	Horizontal single-axis, independent row	Tracking range of motion	±50°
String voltage	1,500 V _{DC}	Operating temperature range	Array powered: -20°C to 55°C (-4°F to 131°F) AC powered: -40°C to 55°C (-40°F to 131°F)
Typical row size	112 - 120 modules, depending on module string length	Module configuration	2 in portrait. 4 x 1,500 strings per standard tracker. Partial length trackers available.
Drive type	NX patent-pending self-locking, distributed drive	Module attachment	Self-grounding, electric tool-actuated fasteners standard. Clamping system optional.
Motor type	48 V brushless DC motor	Materials	Galvanized steel
Array height	Rotation axis elevation 1.9 to 2.5 m/ 6'2" to 8'2"	Allowable wind speed	Configurable up to 210 kph (130 mph) 3-second gust
Ground coverage ratio (GCR)	Typical range 28-50%	Wind protection	Intelligent wind stowing with self-locking, distributed drive system for maximum array stability in all wind conditions
Modules supported	Mounting options available for most utility-scale crystalline modules	Foundations	Standard W8 section foundation posts. Typically ~160 piers/MW
Bifacial features	Available with optimized central torque tube gap		

ELECTRONICS AND CONTROLS

Solar tracking method	Astronomical algorithm with backtracking. TrueCapture™ upgrades available for terrain adaptive backtracking and diffuse tracking mode
Control electronics	NX tracker controller with inbuilt inclinometer and backup battery
Communications	Zigbee wireless communications to all tracker rows and weather stations via network control units (NCUs)
Nighttime stow	Yes
Power supply	Array powered: NX Integrated DC pre-combiner & power supply AC powered: Customer-provided 240 V _{AC} circuit

INSTALLATION, OPERATIONS AND SERVICE

PE stamped structural calculations and drawings	Included
Onsite training and system commissioning	Included
Installation requirements	Simple assembly using swaged fasteners and bolted connections. No field cutting, drilling or welding
Monitoring	NX Data Hub™ centralized data aggregation and monitoring
Module cleaning compatibility	Compatible with virtually all standard cleaning systems
DC string monitoring	Available with array-powered option
Warranty	10-year structural, 5-year drive and control components
Codes and standards	UL 3703, UL 2703, IEC 62817

Installer-friendly array height with construction rotation feature for faster, easier installation