



## **APPENDIX 2-B**

# **Solar Racking Specification Sheets**

# NX Horizon

## Smart Solar Tracking System

Serving as the backbone on over 35 gigawatts of solar power plants around the world, the NX Horizon™ smart solar tracker system combines best-in-class hardware and software to help EPCs and asset owners maximize performance and minimize operational costs.

### Flexible and Resilient by Design

With its self-aligning module rails and vibration-proof fasteners, NX Horizon can be easily and rapidly installed. The self-powered, decentralized architecture allows each row to be commissioned in advance of site power, and is designed to withstand high winds and other adverse weather conditions. On a recent 838 megawatt project in Villanueva, Mexico, these design features allowed for the project to go online nine months ahead of schedule.

### TrueCapture and Bifacial Enabled

Incorporating the most promising innovations in utility scale solar, NX Horizon with TrueCapture™ smart control system can add additional energy production by up to six percent. Further unlocking the advantages of independent-row architecture and the data collected from thousands of sensors across its built-in wireless network, the software continuously optimizes the tracking algorithm of each row in response to site terrain and changing weather conditions. NX Horizon can also be paired with bifacial PV module technology, which can provide even more energy harvest and performance. With bifacial technology, NX Horizon outperforms conventional tracking systems with over 1% more annual energy.

### Quality and Reliability from Day One

Quality and reliability are designed and tested into every NX Horizon component and system across our supply chain and manufacturing operations. NextTracker is the leader in dynamic wind analysis and safety stowing, delivering major benefits in uptime and long-term durability. NX Horizon is certified to UL 2703 and UL 3703 standards, underscoring NextTracker's commitment to safety, reliability and quality.

### Features and Benefits

**5 years** in a row

Global Market Share Leader (2015-18)

**35** GW

Delivered on 5 Continents

**Best-in Class**

Software Ecosystem and  
Global Services

**Up to 6%**

Using TrueCapture Smart  
Control System



**GENERAL AND MECHANICAL**

Tracking type	Horizontal single-axis, independent row.
String voltage	1,500 V <sub>DC</sub> or 1,000 V <sub>DC</sub>
Typical row size	78-90 modules, depending on module string length.
Drive type	Non-backdriving, high accuracy slew gear.
Motor type	24 V brushless DC motor
Array height	Rotation axis elevation 1.3 to 1.8 m / 4'3" to 5'10"
Ground coverage ratio (GCR)	Configurable. Typical range 28-50%.
Modules supported	Mounting options available for virtually all utility-scale crystalline modules, First Solar Series 6 and First Solar Series 4.
Bifacial features	High-rise mounting rails, bearing + driveline gaps and round torque tube.
Tracking range of motion	Options for ±60° or ±50°
Operating temperature range	SELF POWERED: -30°C to 55°C (-22°F to 131°F) AC POWERED: -40°C to 55°C (-40°F to 131°F)
Module configuration	1 in portrait. 3 x 1,500 V or 4 x 1,000 V strings per standard tracker. Partial length trackers available.
Module attachment	Self-grounding, electric tool-actuated fasteners.
Materials	Galvanized steel
Allowable wind speed	Configurable up to 225 kph (140 mph) 3-second gust
Wind protection	Intelligent wind stowing with symmetric dampers for maximum array stability in all wind conditions
Foundations	Standard W6 section foundation posts

**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	SELF POWERED: NX provided 30 or 60W Smart Panel AC POWERED: Customer-provided 120-240 V <sub>AC</sub> 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 NX qualified cleaning systems
Warranty	10-year structural, 5-year drive and control components.
Codes and standards	UL 3703 / UL 2703 / IEC 62817

# Ballast



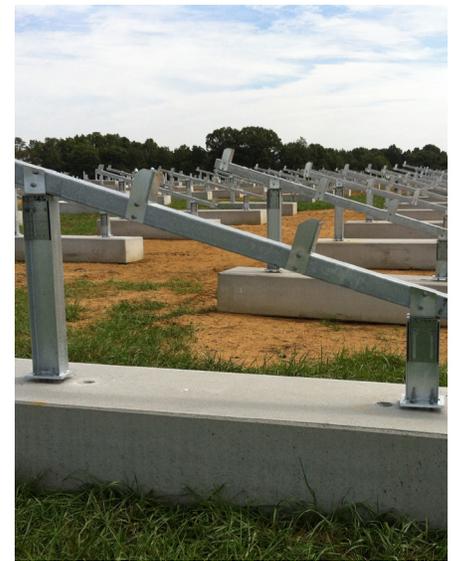
When ground penetration is not allowable, engineering innovation must prevail. Such a feat can be found in our ballasted foundations. These solutions are perfect for municipal solid waste landfills, brownfields, and other sites where non-penetrable solar racking solutions are required. Our engineers and designers consider important parameters such as dynamic settlements, landfill cap characteristics, slope and stability before designing a reliable and cost-effective ballasted mounting solution to suit the needs each specific site.

## Customized Solutions

- Each precast ballast block is engineered for site specific loading conditions.
- Proprietary on-site testing allows for ballasts to be engineered with a site-specific coefficient of friction, potentially reducing ballast sizing.
- Posts and anchor rods are preassembled in ballasts for quicker onsite installation.
- Fiber meshing is used in precast ballast in-lieu of rebar, which allows the concrete to cure faster and stronger.

## Built to Last

- Ballast blocks can be unloaded and placed on site with standard construction equipment.
- Racking posts and brackets are adjustable, which can accommodate any landfill sinkage throughout the project's life cycle.
- Precast ballast are manufactured at a consistent rate and are not impacted by conditions such as inclement weather or concrete spoils which occur with onsite batch plants.
- Strong, durable concrete ballast blocks can be relocated and re-used over time.



## Specifications

Wind Loads	170 mph+
Snow Loads	90+ psf
Pre-Assembled Parts	Reduced installation time
Precast Ballasts	Less onsite installation time
Tilt Angle	5-40 degrees
Warranty	20 years
Proprietary On-site Testing	Reduces ballast sizing
Module Configuration	Portrait or landscape (all module frame types)
Raised Purlin	Integrated bonding and grounding
Listing	UL 2703

# GLIDE Wave



When EPCs and developers need a dependable, low-maintenance fixed-tilt ground mount system, they turn to GLIDE Wave. With over 5 GW of projects deployed across the U.S., our flexible design can be adapted to meet the project specific needs on any site, no matter the challenges.

## Value Engineered

- Multiple foundation types are available to meet any unique underground soil conditions.
- Arrays are designed using continuous rows to follow the existing terrain and minimize the number of foundations required.
- Raised purlin are utilized as an integrated bonding and grounding method, which is UL 2703 listed, eliminating the need for additional grounding clips or washers.
- Parts and components are domestically sourced and manufactured for faster turnaround times.

## Efficient Installation

- Pre-assembled parts and components reduce the number of connections needed at each table/bay by up to 50%.
- Components are designed with adjustable tolerances to make field installation a smoother process.
- Dedicated project management and in-house installation teams capable of completing full structural installation of an array.
- Integrated wire management and equipment posts available to simplify eBOS installation.



## Specifications

Wind Loads	170 mph+
Snow Loads	90 psf+
Pre-Assembled Parts	Reduced installation time
Slope	Accommodates up to 30%
Warranty	20 years
Post Type	Cee posts or I-beam options available
Module Configuration	Portrait or landscape (all module frame types)
Raised Purlin	Integrated bonding and grounding
Listing	UL 2703