Appendix 2-2

Array Technologies DuraTrack<sup>®</sup> HZ v3 Tracking System Specification Sheet



## FOLLOW THE SUN. Follow the leader.



**7%** LOWER LCOE

## DuraTrack<sup>®</sup> HZ v3

Three decades of field-tested design improvements have resulted in the DuraTrack<sup>®</sup> HZ v3 — the most durable, reliable tracking system under the sun. While our single-bolt module clamp and forgiving tolerances streamline installation, and our flexibly linked architecture maximizes power density, it's our innovative use of fewer components and a failure-free wind management system that makes Array Technologies the best choice for solar trackers. **Better. Stronger. Smarter.** 



#### HIGH POWER DENSITY.

Higher density means more power and more profit. DuraTrack HZ v3 offers the unique ability to maximize the power density of each site, boasting 100 modules per row and higher density than our closest competition.



### LEADING TERRAIN ADAPTABILITY.

Our flexibly linked architecture, with articulating driveline joints and forgiving tolerances, creates the most adaptable system on the market for following natural land contours while creating the greatest power generation potential from every site.



#### FEWER COMPONENTS. GREATER RELIABILITY.

Array was founded on a philosophy of engineered simplicity. Minimizing potential failure points (167 times fewer components than competitors), DuraTrack HZ v3 consistently delivers higher reliability and superior uptime.



## FAILURE-FREE WIND DESIGN.

DuraTrack HZ v3 was designed and field tested to withstand some of the harshest conditions on the planet. It is the only tracker on the market that reliably handles wind events with a fully integrated, fully mechanical, passive wind-load mitigation system without the need for complex communication systems, batteries, or power.



#### ZERO SCHEDULED MAINTENANCE.

Maintenance-free motors and gears, fewer moving parts, and industrial-grade components—what does this mean for our customers? No scheduled maintenance required. While our competitors average two unscheduled maintenance events per day, we average only one per year.



#### **COST VERSUS VALUE**

We believe value is more than the cost of a tracking system. It's about building with forgiving tolerances and fewer parts so construction crews can work efficiently. It means protecting your investment with a failure-free wind management system. It also includes increasing power density. But most of all, value is measured in operational uptime, or reliability.

#### THE GLOBAL LEADER IN RELIABILITY

Array has spent decades designing and perfecting the most reliable tracker on the planet. Fewer moving parts, stronger components and intelligent design that protects your investment in the harshest weather are but a few of the innovative differences that keep your system running flawlessly all day and you resting easy at night.

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# **30 GW** years of $167 \times$ fewer components than competitive trackers

#### **STRUCTURAL & MECHANICAL FEATURES/SPECIFICATIONS**

Tracking Type	Horizontal single axis
Less than 1 drive motor /MW	Up to 1.559 MW DC
String Voltage	Up to 1,500V DC
Maximum Linked Rows	32
Maximum Row Size	116 modules crystalline, and bifacial; 240 modules First Solar 4; 90 modules First Solar 6 and 6 Plus
Drive Type	Rotating gear drive
Motor Type	2 HP, 3 PH, 480V AC
East-West/North-South Dimensions	Site / module specific
Array Height	54" standard, adjustable (48" min height above grade)
Ground Coverage Ratio (GCR)	Flexible, 28-45% typical, others supported on request
Terrain Flexibility	N-S tolerance: 0-15% standard, 26% optional; Driveline: 40° in all directions
Modules Supported	Most commercially available, including framed and frameless thin film, crystalline silicon, hetero junction and bifacial.
Tracking Range of Motion	± 52° standard, ± 62° optional
Operating Temperature Range	-30°F to 140°F (-34°C to 60°C)
Module Configuration available.	Single-in-portrait standard, including bifacial. Four-in-landscape (thin film)
Module Attachment	Single fastener, high-speed mounting clamps with integrated grounding. Traditional rails for crystalline in landscape, custom racking for thin film and frameless crystalline and bifacial per manufacturer specs.
Materials	Pre-galv steel, HDG steel and aluminum structural members, as required
Allowable Wind Load (ASCE 7-10)	140 mph, 3-second gust exposure C
Wind Protection	Failure free passive mechanical system protects against wind damage without the use of complex communications systems, batteries — no power required

#### **ELECTRONIC CONTROLLER FEATURES/SPECIFICATIONS**

Solar Tracking Method	Algorithm with GPS input
Control Electronics	MCU plus Central Controller
Data Feed	MODBUS over Ethernet to SCADA system
Night-time Stow	Yes
Tracking Accuracy	± 2° standard, field adjustable
Backtracking	Yes

#### **INSTALLATION, OPERATION & MAINTENANCE**

Software	SmarTrack optimization available
PE Stamped Structural Calculations & Drawings	Yes
On-site Training and System Commissioning	Yes
Connection Type	Fully bolted connections, no welding
In-field Fabrication Required	No
Dry Slide Bearings and Articulating Driveline Connections	No lubrication required
Scheduled Maintenance	None required
Module Cleaning Compatibility	Robotic, Tractor, Manual
GENERAL	
Annual Power Consumption (kWh per 1 MW)	400 kWh per MW per vear, estimate