

Q.TRACK™

Engineering that's tough where it counts—and simple where it saves

Rugged, integrated solar tracking systems custom-built for real-world performance, long-term reliability, and stronger returns.

We design and deliver rugged, utility-scale tracker systems that perform in harsh climates, uneven terrain, and challenging environments.

Backed by Qcells and Hanwha, FLEXRACK combines deep expertise in tracking and metal manufacturing to deliver integrated systems of modules, trackers, and technology that reduce risk, simplify logistics, and improve long-term performance. With a cost-effective 55 degree stowing methodology, ensure your assets will be protected in wind, hail, and dynamic elemental real-world conditions. We customize every system to its site, balancing durability and efficiency to support faster builds, reliable operation, and resilient returns across the full asset lifetime. Serving Community Solar, C&I, and Utility-scale markets, FLEXRACK is ready to offer customer-centered service that builds long-lasting partners.



Minimize Civil Work with Terrain Following

The **Q.Track-FXT™** single-post universal joint allows trackers to adapt to site topography, lowering earthwork requirements and civil costs without introducing additional system complexity.



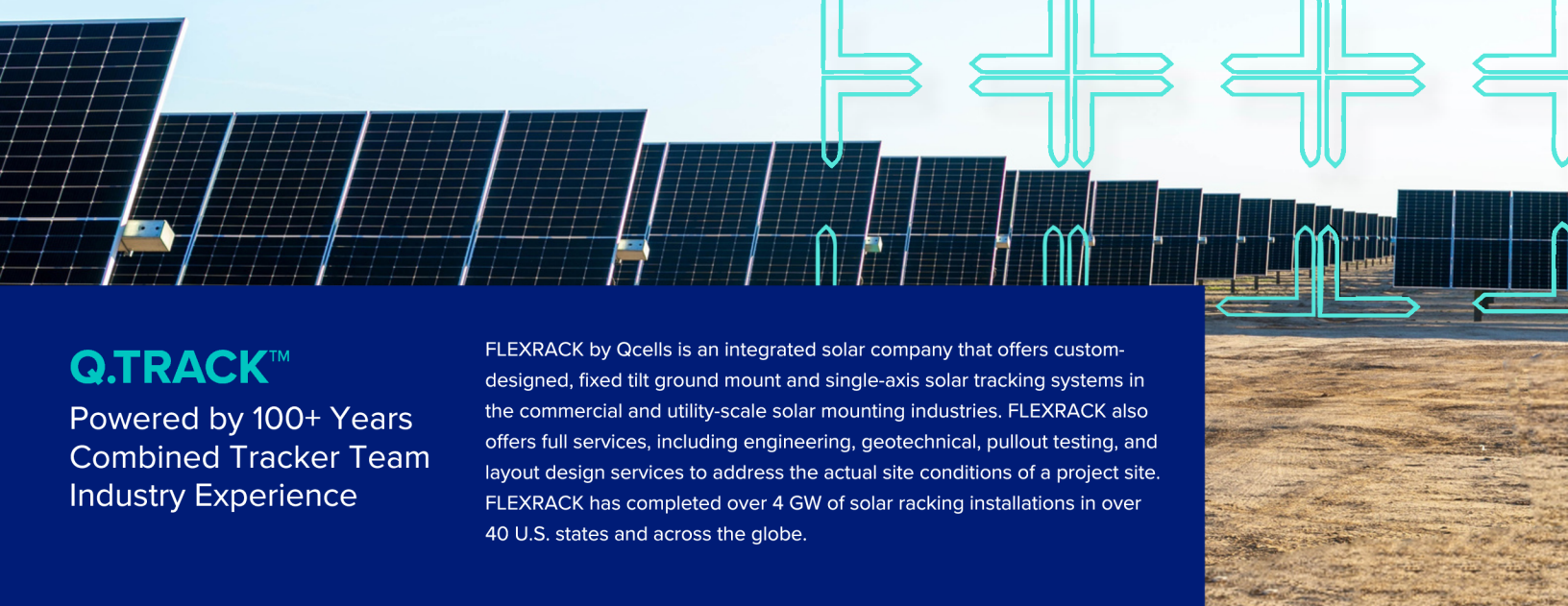
Simplify Installation with Pre-assembled Rails

As a unified rail platform, the **Q.Flex™ Rail System** reduces handling, simplifies alignment, and accelerates module installation, helping crews achieve up to 50% faster installs compared to traditional rail assemblies.



Optimize Returns with Advanced Technology

Using drone-surveyed, 3D-modeled Advanced Backtracking, each tracker row is independently optimized through a combination of shade-avoidance and sun-tracking algorithms, improving plant performance even on complex terrain.



Q.TRACK™

Powered by 100+ Years Combined Tracker Team Industry Experience

FLEXRACK by Qcells is an integrated solar company that offers custom-designed, fixed tilt ground mount and single-axis solar tracking systems in the commercial and utility-scale solar mounting industries. FLEXRACK also offers full services, including engineering, geotechnical, pullout testing, and layout design services to address the actual site conditions of a project site. FLEXRACK has completed over 4 GW of solar racking installations in over 40 U.S. states and across the globe.

CONTROL SYSTEMS	Controls Communication Protocol	Modbus over Zigbee; Ethernet (CAT6)
	SCADA Communication Protocol	Modbus TCP
	Monitoring & Maintenance Interface	Network Control Unit Webpage; Bluetooth App
	Tracker Control Unit Models	Self-powered (60W PV Panel) Grid-powered (100-240 VAC)
	TCU / NCU Ratio	1 TCU per tracker / up to 252 TCUs per NCU
	Operating Temperatures	-30°C to 60°C (-22°F to 140°F) * See Note for Self-powered operating limits
	Battery (Self-Powered)	LiFePO4 6.7 Ah
	PV Module (Self-powered)	Dedicated 60W monocrystalline
	Battery Charging	CC/CV algorithm for LiFePO4 chemistries to extend battery life
	Communication	Wireless Zigbee
	Controller Size	13.85 x 10.26 x 6.4 in (352 x 260 x 163 mm)

LIST OF SERVICES	• Geotechnical Services	• O&M Services Available
	• Structural Analysis	• Project Management
	• Layout and Design Services	• PE Stamp
	• Foundation Design Services	• On-site Training
	• Pull Testing	• Drone Utilized Tracker Commissioning
	Our proprietary drone methodology streamlines commissioning and reduces risk.	

TRACKING	Tracking Method	Single-axis horizontal, distributed drive
	Backtracking	Advanced Backtracking: 3D modeled R2R shade avoidance utilizing drone scan technology. Overcast Optimization: Intelligently positions trackers to optimize energy yields for diffuse and bifacial modules.
	Tracking Range Ground	Up to 110° (±55°)
	Coverage Ratio (GCR)	No limitation. Configurable based on site conditions
	Tracking Accuracy	2°
	Stow Features	Full tilt (±55°) stow for wind, hail and snow Flood stow available Hail Alert available to support Hail Stow function

* Self-powered 6.7Ah operating limits are defined by the internal LiFePO4 battery. Cold temperatures, reduced irradiance, snow cover, and wind exposure may impact charging performance and trigger protective stow behavior.

UL Compliance All FLEXRACK by Qcells systems have gone through UL testing. Each component-connection point within the system conforms to NEC codes for electrically bonded and conductive systems. Testing is performed by RETC in accordance with UL 3703.

Certification covers both United States and Canada.

CONFIGURATION ARRAY	Panels per Tracker	Configurable up to 4-string rows
	Trackers per Controller	1
	String Voltage	Up to 1,500 volts
	Posts per Tracker	Dependent on tracker size and site conditions, ~ 15 posts per 90 panels
	Panel Configurations	1 in portrait (crystalline) 2 in landscape (crystalline) Thin-film: Compatible with FS6 and FS7
	Drive Type	Slew Drive: 24 Volts DC Motor

OPERATIONS AND MAINTENANCE	Scheduled Maintenance	Ask about O&M services
	Warranty (Extensions available)	10 Years: Structural 5 Years: Drives and Electrical
	Certifications	UL 3703
	Dynamic Load Management	Integrated frictional dampening and limited progressive dampening technology

INSTALLATION TOLERANCES	North–South Terrain Following	Q.Track-FXT™ : Max change in slope at joint: 25%
	Maximum Slope	15%
	North–South Post Spacing	± 1.5 inches (38 mm)
	East–West Post Alignment	± 0.75 inches (19 mm)
	Post Height	± 1 inch (25 mm)
	Post Plumb	± 1°

CONSTRUCTION	Structural Materials	Galvanized Steel. Multiple coatings available.
	Balanced Bearings	UV-rated engineering plastic, no lubrication needed
	Mechanical Connections	Bolted - no welding, drilling or cutting required
	Foundation Types	Driven Piles, Ground Screws, Helical, and Ballasted

ENVIRONMENTAL	Wind (IBC-2012 / ASCE 7-10)	Up to 130 mph Customizable to higher wind speeds 35 mph stow position
	Snow Load	70 psf Customizable to higher loads

Testing Rain, wind, sleet, snow, heat – every day and everywhere, our products are battling the elements. We perform ongoing extensive testing in these key areas: wind tunnel, structural load, electrical bonding, and life cycle. FLEXRACK by Qcells trackers also undergo wind tunnel testing performed by CPP, per American Society of Civil Engineers Standard ASCE 7.