LIANSTOR ENERGY

Product Brochure

TG8-V3

Solar Tracking Racking

Powerful rotation, rear actuator, dual-side damping

WZPV-SZTZ-8



TG8-V3 WZPV-SZTZ-8

Tracking, Load Bearing and Buffering, Each with Dedicated Structures

Azimuth slewing and the rear actuator have separate roles; side dampers connect the moving frame to the support structure.

Strong azimuth output

The SE7A Rev.C delivers 1026 N·m in normal output. Short-time maximum 1596 N·m, up to 3 seconds.

Rear actuator adjusts tilt

25 kN maximum dynamic push-pull comes from the independent actuator, adjusting the whole array's tilt angle.

Side dampers soften shocks

They dissipate energy through relative motion, easing array sway and transient disturbances reaching the structure and drivetrain.

Concentrated connections ease service

Slew drive, actuator, dampers and control box are clearly located for item-by-item checks and paired replacement.

Central Slew for Azimuth, Rear Actuator for Tilt

The figures show this model's real assembly relationships; all 8 module positions move as one unit.



1 azimuth slew drive

Set between the column and the upper moving structure, it changes the array's horizontal orientation.

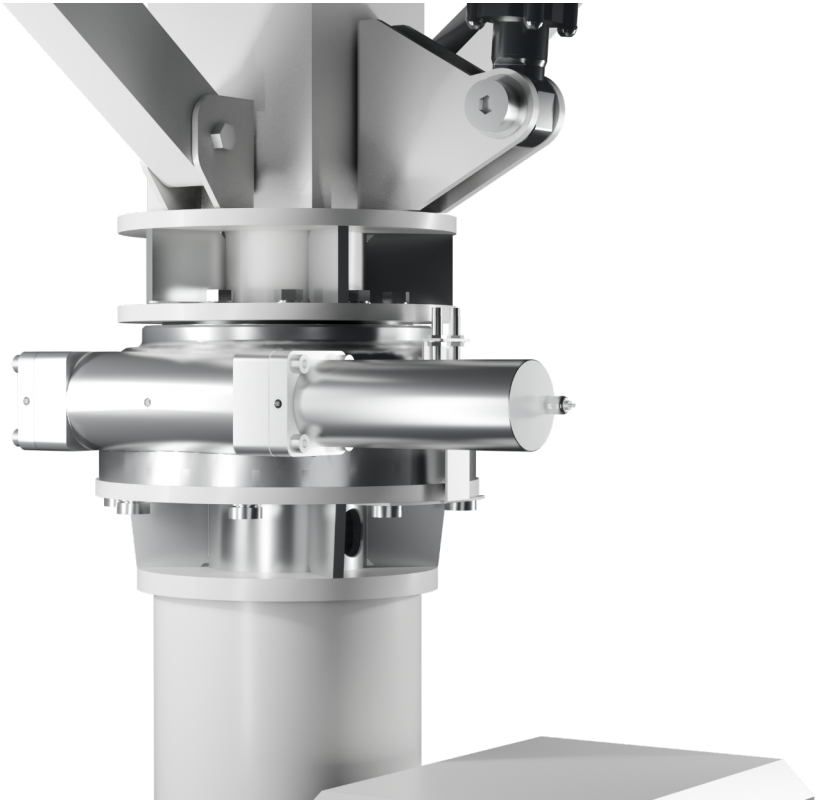
1 rear linear actuator

Connected between the support and moving frame, it adjusts the array tilt through extension.

2 dampers

Connected left and right to the moving structure, they generate damping through relative motion.

1026 N·m Normal Output, 1596 N·m Short-Time Peak



Normal-motion sizing

1026 N·m is the SE7A Rev.C normal output torque.

Short-time peak has a time limit

1596 N·m is allowed for at most 3 seconds and must not be used as a continuous operating rating.

Holding capacity

Holding moment: 13,500 N·m.
Tilting moment: 7,000 N·m.
The two figures are used for component sizing respectively.

Component parameters are not the system's wind capability; stow position, load combinations and limits follow the project design.

Rear Actuator Hands Tilt to an Independent Actuator



Max. dynamic force | 25 kN

Applies to the corresponding Y817W actuator; push-pull force is not converted into unverified system torque.

Dual Hall displacement feedback

151.92 pulse/mm per channel supplies extension count signals to the companion controller.

Connections and service

Terminations, pins and locking parts are installed per the supply drawings; support the moving structure before replacement.

The actuator's 50 kN static rating applies only to the source drawing's half-stroke condition; duty cycle, mounting orientation and waterproofing conditions are in the separate technical datasheet.

Side Dampers Ease Wind Disturbance and Transient Shocks



The buffering comes from damping

Relative motion makes the dampers dissipate energy, helping reduce sway and shocks reaching the structure and motor drivetrain.

Force varies with velocity

The S30 series source drawing provides extension and compression force-velocity data for damper matching.

Works with weather protection

Damping does not replace structural wind design; the companion controller can move to the stow position per the project.

TG8-V3 uses 2 dampers. Series source-drawing performance must match the BE12-20260326 supplied termination revision.

Assembly and Maintenance Start from Clear Component Relationships

Design point	Value in use
Single-column integrated load path	One column, central slew drive and load-bearing frame form a tracking unit, easing unit-by-unit installation.
Division between slew and actuator	Azimuth and tilt are checked, wired and commissioned separately, easing motion fault location.
Terminations and connectors	Paired per interfaces, pins and BOM; assembly sequence and checkpoints can be handed over item by item.
Moving cables and service space	Check movement margins and interference at installation; keep the full motion space at maintenance.
Long-term operation management	Anti-corrosion, tightening, sealing, feedback and maintenance archives are checked continuously to reduce running with faults.

Key Figures, Each with Its Conditions of Use

Component	Parameter	Conditions
Slew drive	1026 N·m normal; 1596 N·m max.	Maximum torque up to 3 s, SE7A Rev.C.
Actuator	25 kN dynamic; 50 kN static	Static value only at half stroke; 10% max. duty cycle.
Actuator stroke	300 ± 3 mm	Minimum centre distance 800 ± 3 mm; not a universal installation starting point.
Feedback	Slew Hall A/B; actuator dual Hall	Requires controller counting, zero position and angle calibration.
Dampers	2 units; S30 series 535 mm stroke	Current terminations and installation distance must be confirmed per the supplied revision.

From Tracking to Shutdown, Every State Has a Basis for Action

Requires the companion controller with limits, feedback and protection strategies calibrated; thresholds and postures are set per project.

Operating state	Control actions	Site purpose
Automatic tracking	Computes the target orientation, drives azimuth slew and tilt actuator separately, and reads motion feedback.	Adjusts the whole array with the sun.
Night parking	Enters the preset parking posture; recovers next morning under permitted conditions.	Avoids useless motion outside generation hours.
Weather protection	With weather or wind-speed input, moves to the stow position by threshold.	Works with the structural design against severe weather.
Manual service	Authorized jogging or positioning, with remote automatic motion restricted.	Eases inspection, cleaning and part replacement.
Abnormal pause	Handles loss of contact, feedback anomalies or mechanical blockage per controller configuration.	Locate the fault first, then recover per the process.

Many Devices, One Place to View and Manage

The optional monitoring platform puts operating status, authorized operations and history into one entry point.





Device status

View online status, azimuth and tilt, and the current operating mode.

Authorized control

Jog, position and stop by role, with operation records retained.

The monitoring interface is an example of the supplier platform; devices, values and generation shown on the page are not measured results of this model. Generation statistics require connected metering data.

Racking Excludes PV Modules

Only the right structure, modules and control configuration make a tracking unit that fits the project.

Configuration item	Selection and supply notes
Racking and actuation	Model, structural parts, drive assemblies and connectors follow the order BOM.
PV modules	Not included. The 8 positions in the figure illustrate the mounting relationship; module size, mass and clamping zone must be matched and confirmed.
Module power	Determined by the selected modules; the number of racking positions does not represent shipped generation capacity.
Control and monitoring	Controller, sensors, communication method and platform services are listed separately.
Foundation and installation	Foundations, anchors, lifting and construction services are confirmed per project scope.
Project inquiry	Provide location, module model, design wind/snow loads, ground conditions and monitoring requirements.

Project Selection and Technical Support

Structural selection, site installation and follow-up maintenance in one set of documents.

Selection inputs

Project location, module specifications, installation quantity, wind/snow loads, ground conditions and grid-connection plan.

Technical documents

Product brochure, technical datasheet, installation & commissioning manual and O&M manual are supplied separately; construction uses the approved project drawings.

LIANSTOR Energy

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C Certified

L Long-lasting

E Efficient

A Affordable

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