



NX Drive

Lithium-Ion Energy Storage System (ESS)

NX Drive™ by NEXTracker is the most flexible and reliable energy storage system on the market today, providing best-in-class safety features for the toughest environmental conditions. Designed for utilities, developers, and energy partners, NX Drive supports multiple battery technologies and provides unprecedented configurability for a wide range of storage applications, project sizes, and future needs. Engineered to maximize energy and power density in a standardized package, NX Drive reduces balance of system (BOS) costs from design through installation and operation.

NX Drive applies best practices for lean and robust system integration to drive safety, quality, flexibility, and efficiency while lowering BOS and operating costs.

Now available
in multiple
sizes and
configurations

20 ft

40 ft

Limitless Scale, Repeatable Execution

- Platform approach supports multiple battery technologies and configurations for maximum application and supply chain flexibility.
- Standardized product leverages industrywide supply chain efficiencies, scale, and volume, including Flex's global manufacturing footprint across 30 countries.
- Modular, pre-engineered design simplifies project development and enables repeatable deployment for maximum project velocity.

Advanced Technology, Safety, and Compliance

- Purpose-built, structurally reinforced enclosure features logistics-friendly dimensions equivalent to ISO HQ container; meets Z4 UBS seismic requirements.
- Efficient internal design maximizes energy and power density.
- Patent-pending side-door openings enable easy access to all equipment from outside of the enclosure.
- DC aggregator panel supports quick battery string connectivity, protection, and isolation.
- AC panel provides auxiliary power distribution.
- Thermal management system is pre-engineered to battery manufacturers specifications for maximum performance and longevity.
- Integrated fire detection and suppression system.
- SCADA-ready monitoring provides remote status awareness of the entire battery energy storage system.
- Enables UL 9540-compliant systems and guarantees environmental requirements prescribed by battery manufacturers.

NX Drive Specifications

Operating temperature range	-40 to 45 Celsius
SCADA interface	Modbus TCP/IP
Aux. load interface	480/380/208 Vac 3-phase available
Thermal management	Wall-mounted, industrial-rated HVAC; performance-based sizing
Fire suppression and detection	UL-listed NOVEC 1230 @ 10% concentration.
Design standard	NEC/NFPA 70E, UL 9540
External dimensions and approximate weights	20 ft L, 8 ft W, 9 ft 6 H; weight: 94,000 lbs
	40 ft L, 8 ft W, 9 ft 6 H; weight: 137,000 lbs
Insulation	50 mm EPS panels w/ R12 value – roof, sides, and floor
Locking mechanism	HH-EA/1
Finish	250 µm fluorocarbon paint Dip galvanized finish available

Battery System Specs for Tier 1 Supplier Technologies

	20 ft container	40 ft container	DC voltage
Sample Size A	Up to 14 racks JH4-3P: 2.7 MWh	Up to 32 racks JH4-3P: 6.0 MWh	1000 Vdc
Sample Size B	Up to 14 racks	Up to 32 racks	1250 Vdc

System Architecture

DCA Panel:

- Fused disconnect
- Ground fault detection
- Surge suppression
- Battery string aggregation
- Power monitoring

Fire Detection and Suppression:

- Fire alarm panel
- Sensors
- Battery backup
- Horn
- Strobe
- Agent + storage container (NOVEC 1230)
- Discharge nozzles, piping, and signs (caution and discharge)

AC Panel:

- Aux. transformer
- Aux. load power distribution
- DC power supplies for battery racks
- Enclosure monitoring system
- UPS for critical loads

Enclosure:

- Insulated roof, floor and walls (R12.5)
- Checker plate floor
- Side doors
- Purpose built and hardened with ISO HQ dimensions

Check with our sales team for compatible battery technologies: storagesales@nextracker.com