



## Energy Storage for Transportable Power Supply

### BENEFITS:

#### Off-Grid Demand Support

Meeting load demands on sites with no grid support

#### Transportable Solution

Demand-based relocation to multiple sites

#### Cost Effective Clean Technology

Non emissive and elimination of fuel costs

#### Quick Access for Service

Minimum clearance for utilization

### TRENDS:

*"There is an increased focus on low carbon and resilient energy systems by local and federal governments. As such, technologies other than standalone diesel generators are becoming increasingly viable options to provide near-instantaneous backup power."*

- University of British Columbia, 2019

### CHALLENGES:

How to avoid increasing fuel prices and emissions related to diesel generators in order to meet seasonally varying load demands of off-grid sites?

### TROES' SOLUTION:

TROES' Energy Storage on Demand solution provides uninterrupted instantaneous power for off-grid sites that have seasonal load demands. These units can be relocated across sites with power inadequacies to support seasonally peaking demands.

# SPECIFICATIONS:

<b>Model</b>	<b>TC-3500-4285</b>
Network	TCP/MODBUS/RS485
<b>Battery Energy Storage System</b>	
Battery Technology	Lithium iron phosphate (LiFePO4)
Nominal Energy Capacity	4285.44kWh
Usable Energy	3590.77kWh
Rated DC Voltage	768V
DC voltage OP range	672V - 852V
Battery Efficiency	98%
Auxiliary AC Voltage	480V, 3 Phase
Utility Frequency	60 Hz
<b>Battery Pack</b>	
C-Rate (charge/discharge)	1C/1C
Nominal Voltage	51.2V
DC Current Rating	180*31A
Capacity	9.216kWh
Operating Temperature	-20° - 50°C
Cycle Life	5000 Cycles (@0.5C/0.5C, 25°C) 4000 cycles (@1C/1C, 25°C)
<b>Mechanical Specifications</b>	
Enclosure	40 ft trailer *2
Thermal Runaway Protection	Yes
HVAC	Air-Conditioning
Color	RAL 7035 Grey-White/RAL 9005 Black
<b>Certifications</b>	
Battery Cell	UL1642
Battery Packs	UL1973, UN38.3

## MOBILE ENERGY STORAGE SYSTEM:

Our proprietary energy storage designs include a Battery Management System (BMS) with 3-layers of control and 3-layers of operation protection and an AI powered Dual-Equilibrium™ Technology, proven to improve battery lifecycle & overall system efficiency.

This mobile energy storage system can be relocated between various sites to reliably provide power, compensate for inadequate systems or provide backup in emergency conditions in place of diesel generators.

Includes:

- Battery Energy Storage System
- Power Conversion System
- 2\*40ft flat bed sub-trailer



401 Bentley St. Unit 3  
Markham, ON  
L3R 9Z7, Canada



1-888-99-TROES (87637)



[info@troescorp.com](mailto:info@troescorp.com)



[www.troescorp.com](http://www.troescorp.com)