

ULBS

LITHIUM-ION CHARGERS

Charger Specification Sheet



Revision: 06/24/2024

24V, 36V, 48V, 72V, 80V & 96V Lithium-ion Chargers

Features:

- / The 24V, 36V, 48V, 72V, 80V, and 96V Lithium-ion Chargers feature a simple, easy-to use, interface.
- / The chargers comply with UL standards.
- / The chargers are lightweight and compact in size.
- / The 24V, 36V, 48V, 72V, 80V, and 96V Lithium-ion Chargers use the CANBUS to communicate with both the forklift and the battery.
- / The three-phase chargers' export function allows for charging records/information to be exported and reviewed easily using the chargers' SD slot
- / The chargers feature fast voltage dropping protection to avoid charger connector damage.
- / The auxiliary power supply design is secure and reliable.
- / This lithium-ion battery charger features multi-level protection, including input over-voltage, under-voltage, output over-voltage, under-voltage, over-current and output short circuit protection.
- / The chargers are designed to have a $\geq 93\%$ conversion efficiency.
- / Unique software calibration function ensure output current and voltage accuracy.



Universal Lithium Battery Supply

Lithium-ion Charger Technical Parameters

Three-Phase 480V Lithium-ion Chargers:

Model	FST-Li-48V200A-480	FST-Li-80V100A-480	FST-Li-80V200A-480
Input Voltage	AC480V Three-Phase Four-Wire System		
Applicable Voltage	24V, 36V, 48V	72V, 80V, 96V	72V, 80V, 96V
Input Current	<26A	<20A	<40A
Breaker Specifications	26A	20A	40A
Maximum Voltage	DC65V	DC110V	DC110V
Maximum Current	200A	100A	200A
Maximum Power	13kW	11kW	22kW
Charging Connector	REMA	REMA	REMA
Communication	CANBUS		
Conversion Efficiency	≥93%		

Three-Phase 240V Lithium-ion Chargers:

Model	FST-Li-48V200A-220V3P	FST-Li-80V100A-220V3P	FST-Li-80V200A-220V3P
Input Voltage	AC240V Three-Phase Four-Wire System		
Applicable Voltage	36V, 48V	72V, 80V, 96V	72V, 80V, 96V
Input Current	<38A	<32A	<64A
Breaker Specifications	40A	40A	70A
Maximum Voltage	DC65V	DC110V	DC110V
Maximum Current	200A	100A	200A
Maximum Power	13kW	11kW	22kW
Charging Connector	REMA	REMA	REMA
Communication	CANBUS		
Conversion Efficiency	≥93%		

220V Single-Phase Lithium-ion Chargers:

Model	FST-6k24200	FST-6k36120	FST-6k48100	FST-6k8070
Input Voltage	Single-Phase 220VAC			
Applicable Voltage	24V	36V	48V	80V
Input Current	<30A	<30A	<30A	<30A
Breaker Specifications	30A	30A	30A	30A
Maximum Voltage	DC30V	DC45V	DC60V	DC100V
Maximum Current	200A@220VAC	120A@220VAC	100A@220VAC	70A@220VAC
Maximum Power	6kW@220VAC	6kW@220VAC	6kW@220VAC	6kW@220VAC
Charging Connector	REMA	REMA	REMA	REMA
Communication	CANBUS			
Conversion Efficiency	≥93%			

Note: These chargers are only designed to work with a 220V Single-Phase power source.

Lithium-ion Charger Technical Parameters

110V Single-Phase Lithium-ion Single Gun Chargers:

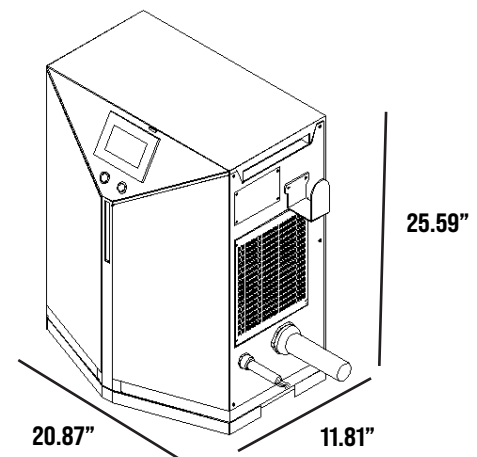
Model	FST-3k24100	FST-3k3660	FST-3k4850	FST-3k8035
Input Voltage	Single-Phase 110VAC			
Applicable Voltage	24V	36V	48V	80V
Input Current	<15A	<15A	<15A	<15A
Breaker Specifications	15A	15A	15A	15A
Maximum Voltage	DC30V	DC45V	DC60V	DC100V
Maximum Current	50@110VAC	30A@110VAC	25A@110VAC	17.5A@110VAC
Maximum Power	1.5kW@110VAC	1.5kW@110VAC	1.5kW@110VAC	1.5kW@110VAC
Charging Connector	REMA	REMA	REMA	REMA
Communication	CANBUS			
Conversion Efficiency	≥93%			

Note: These chargers are only designed to work with a 110V Single-Phase power source.

ULBS' Lithium-ion Charger Dimensions

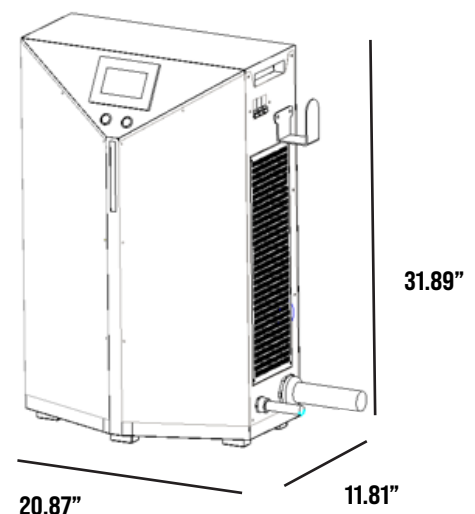
FST-Li-XXVXXXA-480, & FST-Li-80V100A-220V3P Lithium-ion Chargers:

Chargers	FST-Li-XXVXXXA-480 & FST-Li-80V100A-220V3P
Length	11.81"
Width	20.87"
Height	25.59"
Weight	~70.5lbs



FST-Li-48V200A-220V3P & FST-Li-80V200A-220V3P Lithium-ion Chargers:

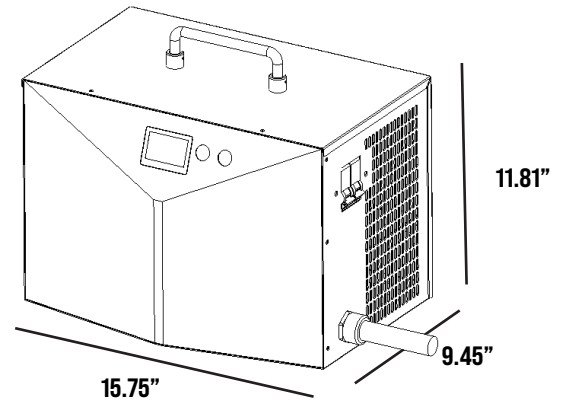
Chargers	FST-Li-48V200A-220V3P & FST-Li-80V200A-220V3P
Length	11.81"
Width	20.87"
Height	31.89"
Weight	~88.18lbs



ULBS' Lithium-ion Charger Dimensions cont.

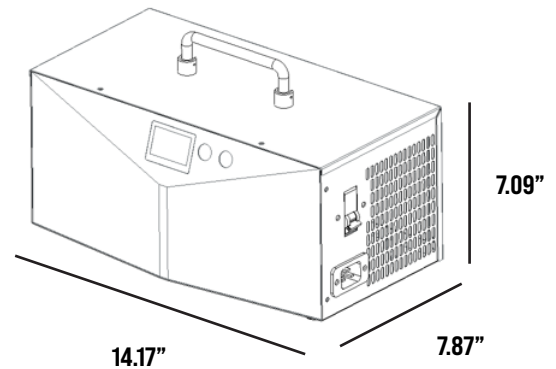
220V Single-Phase Lithium-ion Chargers:

Chargers	FST-6k24200, FST-6k36120, FST-6k48100, FST-6k8070
Length	9.45"
Width	15.75"
Height	11.81"
Weight	~26.5lbs



110V Single-Phase Lithium-ion Chargers:

Chargers	FST-3k24100, FST-3k3660, FST-3k4850, FST-3k8035
Length	7.87"
Width	14.17"
Height	7.09"
Weight	~15.4lbs



ULBS' Lithium-ion Charger Wiring Diagram

Three-Phase 480V & Three-Phase 220V Lithium-ion Charger Wiring Diagram:

Wire Type	Wire Color	Wire Label
Ground (PE-Protected Earth)	Yellow/Green	PE
Phase	Red	L1
Phase	White	L2
Phase	Black	L3

