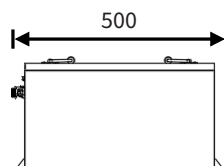
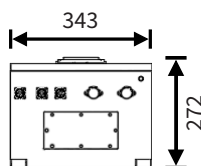
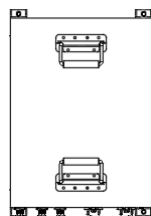


CLF 105-48

Cyclic Lithium battery



Dimensions (mm)



Certifications



Standard terminal



Typical applications

- High power electric vehicles
- Mobility scooters
- Electric wheelchairs
- AGV
- Medical equipment
- Solar energy
- Golf trolleys
- Electric boating
- Cleaning machines

Features

- Active BMS protection
- CAN-bus & Bluetooth
- Lithium LiFePO4 technology
- Maintenance free
- Durable ACCS housing (IP67 rating)
- Parallel connection only (max. 2)

Nominal voltage	51.2 V
Nominal capacity (25°C)	105.0 Ah
Nominal capacity (0°C)	≥94.5 Ah
Nominal capacity (-10°C)	≥89.25Ah
Cycle life@50%DoD (25°C, 1C-1C)	7000 Cycles
Internal resistance	≤20mΩ (fully charged)
Self discharge	less than 4% per month
Charge temperature range	-20°C ~ 55°C
Discharge temperature range	-20°C ~ 60°C
Charge voltage	58.4 V
Max. charge current	105 A
Max. constant discharge current	125A
Max. pulse discharge current	300 A (Max. 30 sec)
Energy	5Hr: 5376Wh
Cut-off voltage	40 V
Communication	CAN-bus & Bluetooth
CAN-bus connector	WS16K4Z Wipu
Standard terminal	Insert M8
Housing material	SPCC
Dimensions Length	460 mm (ex. connectors)
Dimensions Width	343 mm
Dimensions Height	256 mm (TH:272mm)
Approximate Weight	48.0 kg

Compared to AGM

- **10x** Better cyclic performance
- **3x** Faster charging
- Just **30%** of the weight
- Just **50%** of the size
- Better suited for high current / high drain applications
- Lower costs per cycle
- Longer travel range

Recommended

Having the right battery is often just the beginning. Optimal use of a battery requires having a good battery charger, so that the user can be sure that their battery is always optimally charged and has maximum lifespan.

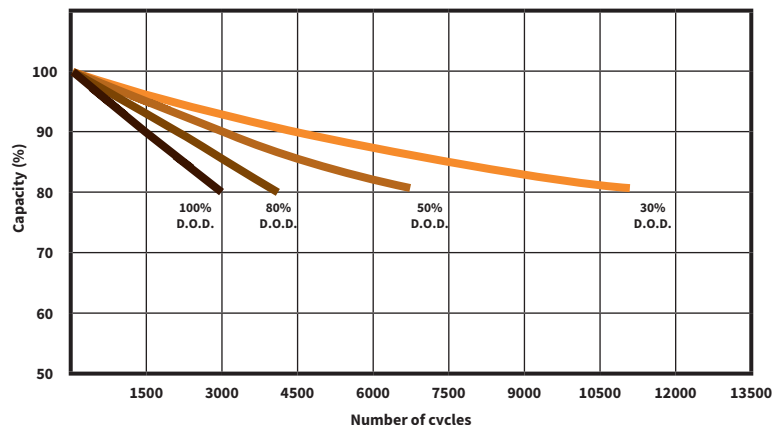
Cellpower offers various intelligent battery chargers, as well as battery testers, battery monitors and battery guards. All designed to easily monitor the battery quality and make sure the battery remains in the best condition possible.



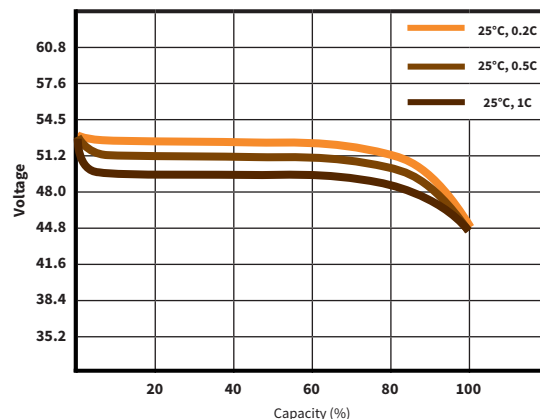
Recommended for CLF 105-48: **ML 916-4815** battery charger

Cycle service life in relation to depth of discharge

Testing conditions: Discharge current 1C, charge 1C
Ambient temperature: 25°C



Discharge characteristics



Models available

Model	Voltage	Capacity (Ah)	Dimensions (mm)	Weight (kg)
CLF 40-24	25.6	40	197*165*172	9.7
CLF 60-24	25.6	60	259*169*219	15.0
CLF 80-24	25.6	80	329*169*224	20.0
CLF 210-24	25.6	210	443*355*241	50.0
CLF 40-48	51.2	40	329*169*224	20.0
CLF 105-48	51.2	105	500*343*272	48.0
CLF 160-48	51.2	160	579*360*266	62.0
CLF 105-72	76.8	105	740*320*262	72.0

Cellpower family

Cellpower supplies a broad range of reliable AGM, GEL and Lithium batteries. Each product series has its own unique characteristics, so that there is a suitable battery for every application with its associated specific usage profile. Combined with the right Cellpower battery accessories, you are able to assemble a high-quality and reliable battery system.



Battery Management System (BMS) data

Charging voltage	54.4~ 55.2 CC/CV
Balancing current	30mA
Communication consumption	≤35mA
Standard mode consumption	≤35mA
Powerdown mode	≤800μA
Max. continuous charge current	125A
Max. continuous discharge current	125A
High voltage protection	60V ±0.4V
High voltage delay time	1 sec
High voltage recovery	58.4V ±0.4V
Low voltage protection	35.2V ±0.4V
Low voltage delay time	1 sec
Low voltage recovery	36.8V ±0.4V
Overcurrent protection	375A ±11A (charge), 400A ±12A (discharge)
Overcurrent delay time	1 sec (charge), 35 sec(discharge)
Overcurrent recovery mode	Disconnect load, auto recovery
Short-circuit protection	10-500uS
Short-circuit recovery mode	Disconnect load, auto recovery
Overtemperature protection cell	60°C
Overtemperature protection BMS	60°C
Protection circuit (MOSFET)	≤20mΩ
Operating temperature range	-40°C ~ 85°C (BMS)

CAN-bus connector output

CAN-bus output connector type	WS16K4Z Wipu aviation square flange Socket 4P with dust cover
	Pin 3 CAN-Low
	Pin 4 CAN-High
Recommended specifications output cable	Shielded & twisted cable type