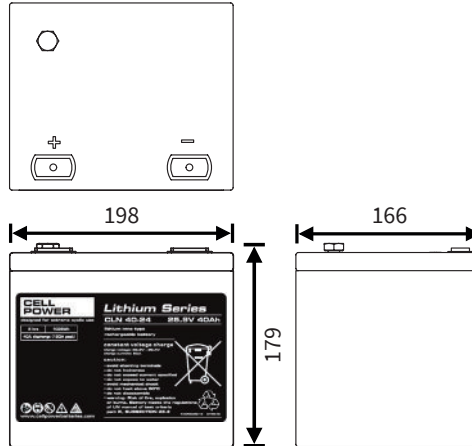


## CLN 40-24

## Cyclic Lithium battery (1800 cycles)



### 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

- BMS protection
- Lithium technology
- Maintenance free
- Durable ACCS housing
- Parallel connection only
- Produced under ISO 9001 & ISO 14001
- UN38.3 & IEC 62133:2017 certified

Nominal voltage	25.9 V
Nominal capacity (25°C)	40 Ah
Nominal capacity (0°C)	≥34 Ah
Nominal capacity (-10°C)	≥28 Ah
Internal resistance	≤15mΩ (fully charged)
Self discharge	less than 4% per month
Charge temperature range	-10°C ~ 45°C *
Discharge temperature range	-20°C ~ 60°C
Charge voltage	29.2 V ~ 29.4 V
Max. charge current	20 A
Max. constant discharge current	40 A
Max. pulse discharge current	120 A (Max. 30 sec)
Energy	5Hr: 1036Wh
Cut-off voltage	21 V
Standard terminal	Insert M6 (5.5 Nm torque)
Housing material	Anti Corrosion Coated Steel (ACCS)
Dimensions Length	198 mm
Dimensions Width	166 mm
Dimensions Height	179 mm
Approximate Weight	11.0 kg

\*: Charge temperature range -10°C ~ 0°C: limit current to <0.1C

### Compared to AGM

- **3x** 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

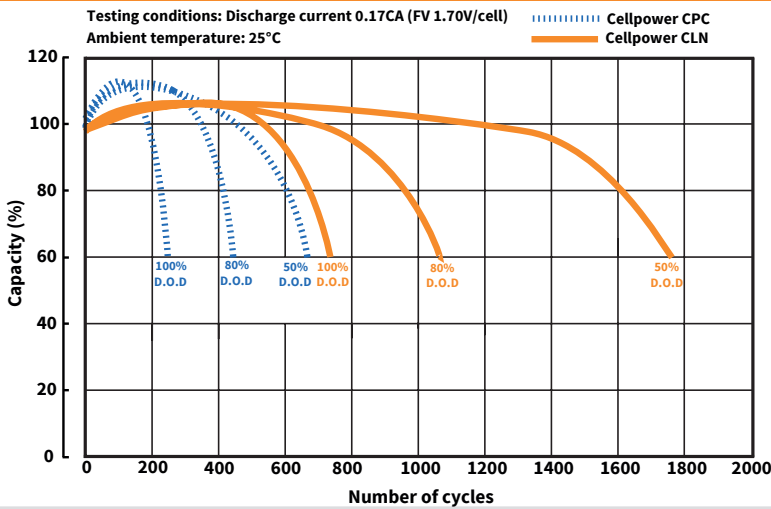
Having the right battery is often just the beginning. Optimal use of a battery requires having a good battery charger, so that the user can be sure that their battery is always optimally charged and has maximum lifespan.

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.

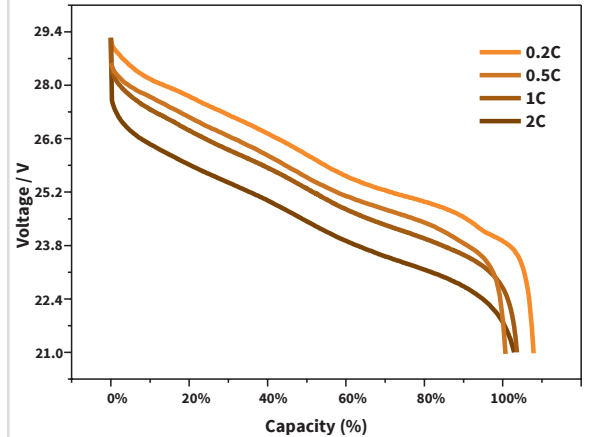


Recommended for CLN 40-24: CCL 24-12 battery charger

## Cycle service life in relation to depth of discharge



## Discharge characteristics curves



## Comparison between CLN 40-24 and similar sized batteries

Model	Technology	Cycles	Voltage	Capacity (Ah)	Dimensions (mm)	Weight (kg)
<b>CLN 40-24</b>	<b>Lithium</b>	<b>1800</b>	<b>25.9</b>	<b>40</b>	<b>198x166x171</b>	<b>11.0</b>
CPC 38-12	AGM	600	12.0	38	198x166x171	13.3
CPC 50-12	AGM	600	12.0	50	198x166x171	14.3
CPX 40-12	AGM	800	12.0	40	197x165x171	14.6
CPX 50-12	AGM	800	12.0	50	197x165x171	16.5
CPG 50-12	GEL	1000	12.0	50	229x138x211	16.5
CPG 55-12	GEL	1000	12.0	55	229x138x214	16.8

## Models available

Model	Voltage	Capacity (Ah)	Dimensions (mm)	Weight (kg)
CLN 40-24	24	40	198x166x179	11.0
CLN 60-24	24	60	260x170x213	16.0
CLN 70-24	24	70	330x171x220	18.6

## 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	29.2V ~ 29.4C CC/CV
Balancing current	84mA
Standby current consumption	≤20 μA
Max. continuous charge current	80A
Max. continuous discharge current	80A
Highvoltage protection	29.96V ±0.1V
Highvoltage delay time	0.5-2 Sec
Highvoltage recovery	28.7V ±0.1V
Lowvoltage protection	21.0V ±0.1V
Lowvoltage delay time	10ms-200ms
Lowvoltage recovery	21.0V ±0.1V
Overcurrent protection	200 ±30A
Overcurrent delay time	5ms-20ms
Recovery mode	Disconnect load, auto recovered
Short-circuit protection	200-500us
Recovery mode	Disconnect load, auto recovered
Overtemperature protection cell	60°C, 1 measuring point
Overtemperature protection BMS	90°C, 1 measuring point
Protection circuit (MOSFET)	≤30mΩ
Operating temperature range	-40°C ~ 85°C
Storage temperature range	-40°C ~ 125°C