

Technical specification

# Charger for LiFePO4 cells

**12 V/10 A**



**PRODUCT WEBPAGE**



## Charger 12 V/10 A for LiFePO4 cells

### 1. INPUT CHARACTERISTICS

No.	Item	Technical specification	Unit	Remark
1-1	Rated input voltage	230	V	AC
1-2	Input voltage range	100 – 240	V	AC
1-3	AC input voltage frequency	47 – 63	Hz	
1-4	Inrush current	< 6	A	@ 264 Vac start-up in cold condition
1-5	Max input current	5	A	

### 2. OUTPUT CHARACTERISTICS

No.	Item	Technical specification	Unit	Remark
2-1	Nominal charge voltage	12	V	4 cells @ 3.00 V 12 V battery with PCM 12 V LiFeYPO4 battery
2-2	Max charger voltage	14,6	V	4 cells @ 3.65 V 14,6 V battery with PCM 14,6 V LiFeYPO4 battery
2-3	Floating charge voltage limit	14,4 ± 0,2	V	
2-4	Constant current	10 ± 0,5	A	
2-5	Power efficiency	> 80	%	At max. load
2-6	Maximum output power	72	W	
2-7	Charge end condition	0,12 – 0,3	A	
2-8	Output voltage range	9 – 14.6	V	

### 3. PROTECTION CHARACTERISTICS

No.	Item	Technical specification	Unit	Remark
3-1	Output over voltage protection	16	V	
3-2	Software over voltage protection	The charger software limits the maximum output voltage to a level suitable for the connected battery system.		
3-3	Thermal cutback	The internal temperature monitor reduces the charger output power in extreme operational temperature to prevent damage.		
3-4	Output current limiting protection	7	A	@ CC Mode
3-5	Output short circuit protection	Short circuit protection at the output terminals. Automatic recovery after restoring to normal conditions.		
3-6	Electronic reverse battery protection	The charger is electronically protected against permanent reversed battery connection.		

### 4. CHARGE INDICATOR (LED)

No.	Item	Technical specification	Unit	Remark
4-1	POWER ON	Green LED on		
4-2	Charging	Red LED on		
4-3	Complete charge	Green LED on		

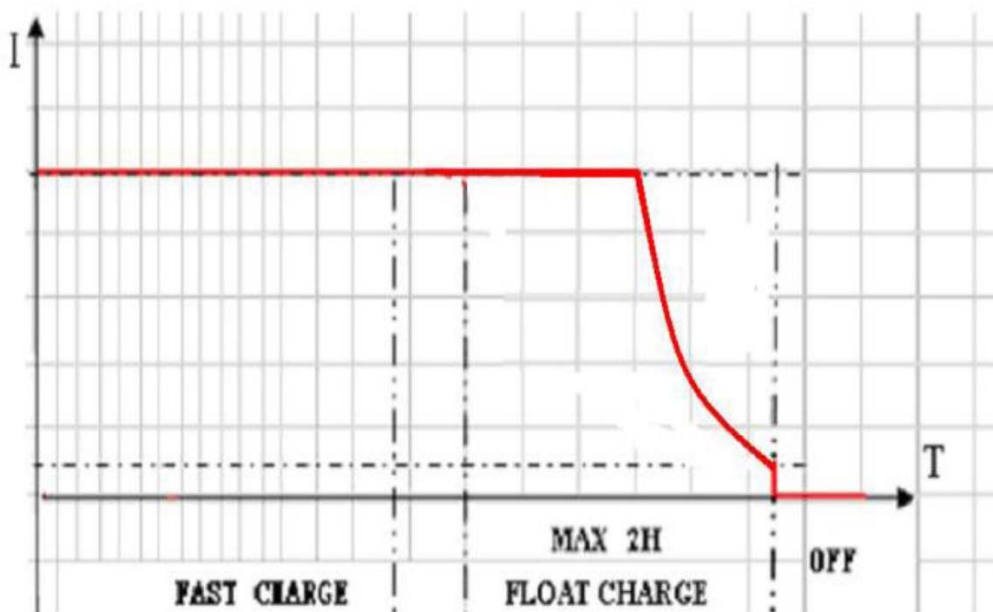
### 5. SAFETY & EMC (CE CONFORMITY REQUIREMENTS)

No.	Item	Technical specification	Unit	Remark
5-1	Electric strength test input – output	1500 V / 10 mA / 1 minute	Vac	No breakdown
5-2	Isolation resistance	> 10 MOhm @ 500 Vdc	MOhm	Input – ground (GND)
5-3	Isolation resistance	> 10 MOhm @ 500 Vdc	MOhm	Output – ground (GND)
5-4	Leakage current	< 3.5 mA	A	Vin = 264 Vac, 50-60 Hz
5-5	Safety	EU standards for small electrical appliances		CE MARK
5-6	EMC – RE	Class B		EN55014
5-7	EMC – CE	Class B		EN55014
5-8	EMC – air discharge	Level 3		EN61000-4-2 (dis. B)
5-9	EMC – contact discharge	Level 3		EN61000-4-2 (dis. B)
5-10	EMC – RS	Level 3		EN61000-4-6 (dis. A)
5-11	EMC – CS	Level 3		EN61000-4-3 (dis. A)
5-10	EMC – EFT	Level 3		EN61000-4-4 (dis. B)
5-10	EMC – Surge	Level 3		EN61000-4-5 (dis. A) 1 kV, 2 kV (dis. B)

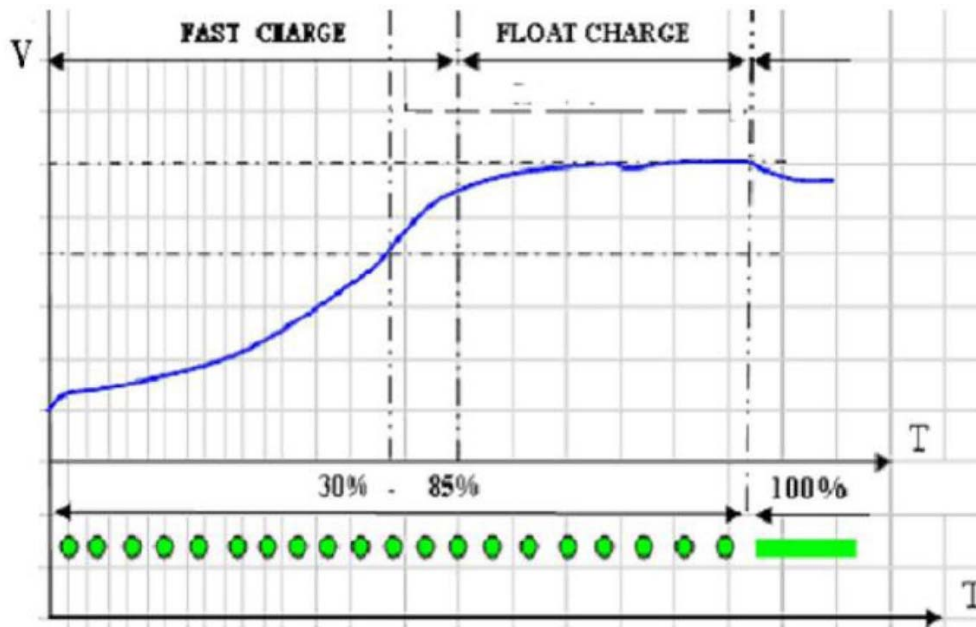
## 6. ENVIRONMENTAL TEST REQUIREMENTS

No.	Item	Technical specification	Unit	Remark
6-1	High ambient operating temperature	+40 °C	deg C	Continuous operation
6-2	Low ambient operating temperature	-10 °C	deg C	Continuous operation
6-3	Highest storage temperature	+70 °C	deg C	Allow 2 hours to recover to normal temperature
6-4	Lowest storage temperature	-40 °C	deg C	Allow 2 hours to recover to normal temperature
6-5	Drop shock	40 g peak		EN60068-2-32:1993

## 7. CHARGING CURVE (CURRENT A)



## 8. CHARGING CURVE (VOLTAGE V)



EVPower a.s.  
Průmyslová 11, 102 19 Prague 10  
Czech Republic, European Union