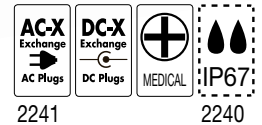


## Chargers for lead acid batteries - switch mode

### tech spec

### 2241 - exchangeable/utskiftbare AC plugs

- 3-step charge control with current detection as charge termination
- Universal input voltage (90-264 VAC)
- 2-pin IEC 320 mains connector
- Mounting bracket available
- Order mains cord separately
- Exchangeable AC and DC plugs
- Waterproof (IP67) version available
- Approvals:
  - Medically certified EN 60601-1 3ed
  - UL approved
  - For updates: see [www.mascot.no](http://www.mascot.no)
- 3-trinns ladekontroll med strømdeleksjon som ladestopp
- Universal inngangsspenning (90-264 VAC)
- 2-pin IEC 320 nettkontakt
- Kan leveres med festebrakett
- Nettledning best. separat
- Utskiftbare AC og DC plugger
- Vanntett (IP67) versjon kan leveres
- Godkjenninger:
  - Medisinsk sertifisert 60601-1 3ed
  - UL godkjent
  - For oppdat.: se [www.mascot.no](http://www.mascot.no)



### Technical specifications

### Tekniske data

### 12 V\*

Input voltage:	Inngangsspenning:	90-264 VAC
Line frequency:	Frekvensområde:	47 – 63Hz
Switch frequency, approx.:	Svitsjefrekvens ca.:	40kHz
Leakage current from battery with mains switched off:	Strømtrekk fra batteri ved frakoblet nett:	≈ 0
Temperature range	Temperaturområde:	
• Operating:	• Drift:	-25°C - +40°C
• Storage:	• Lagring:	-25°C - +85°C
Ripple:	Rippel:	< 100 mV p-p
Efficiency (at 100% load, 230V):	Virkningsgrad (100% last, 230V):	78%
Protection:	Beskyttelse:	Protected against reversed polarity and short circuit proof Polvendings- og kortslutningssikker
Insulation class:	Isolasjonsklasse:	II
Insulation voltage	Isolasjonsspenning	
• Primary – secondary:	• Primær - sekundær:	4000VAC / 5640VDC
Electrical safety standard:	Elektrisk sikkerhetsstandard:	EN 60950, EN 60601-1 3ed, EN 60335-2-29,
EMC standards	EMC standarder	
• Medical:	• Medisinsk:	EN 60601-1-2
• Emission:	• Emisjon:	EN 61000-6-3
• Immunity:	• Immunitet:	EN 61000-6-1
Reliability (MIL-HDBK-217F):	Pålitelighet (MIL-HDBK-217F):	MTBF > 250.000h at 30°C and full load
Output terminals:	Utgangsterminaler:	Cord with/without plug Sekundærledning med / uten plugg
IP-code:	IP-grad:	4X
Dimensions (LxWxH):	Mål (LxBxH):	90 x 45 x 32mm (2240)
Weight:	Vekt:	115g (215g IP67 vers.) 2241:140g

\* Some technical specifications may differ for other voltage versions. / Visse tekniske data kan variere for de forskjellige spenningsversjoner.

### Charge control - Ladekontroll

			6V	12V	24V	36V (2241)	48V
	Max. output power	Maks. utgangseffekt	9,5W	14,7W	14,7W	15,4W	14,7W
Step 1	Charge Current (orange)	Ladestrøm (orange)	1,3A +5/-7%	1,0A +5/-7%	0,5A +5/-7%	0,35A +5/-7%	270mA +5/-7%
Step 2	Charge Voltage (orange)	Ladespenning (orange)	7,35V	14,7V	29,4V	44,1V	58,8V
Step 3	Charge Termination I< (green)	Ladestopp I< (grønn)	250mA ±20%	250mA ±20%	250mA ±20%	150mA ±20%	100mA ±20%
	Standby voltage:	Vedlikeholdsspenning:	6,85V	13,7V	27,4V	41,1V	54,8V
	Recommended battery capacity	Anbefalt batterikapasitet	4-12Ah	3-12Ah	1,5-12Ah	1-7,5Ah	0,8-5Ah



## Exchangeable AC plug models

### Modeller med utskiftbare AC plugger

SMALL HOUSING		
Base model / Grunnmodell		w exch. AC plug
Type	Description / Beskrivelse	Type
2220	AC/DC PSU, max 16W	2221
2924	AC/DC PSU, max 16W	2926
3326	AC/DC PSU, max 28W	3326
2115	NiMH battery charger, max 1,3A	2116
2240	Lead Acid batt. charger, max 1,3A	2241
2240 LI	Li.Ion batt. charger, max 1,3A	2241 LI
2240 LiFePO <sub>4</sub>	LiFePO <sub>4</sub> batt. charger, max 1,3A	2241 LiFePO <sub>4</sub>
Additional housing weight (excl. plug/cord) + 15 g Tilleggsvekt (uten plugg/ledning) + 15 g		

MEDIUM HOUSING		
Base model / Grunnmodell		w exch. AC plug
Type	Description / Beskrivelse	Type
9921	AC/DC PSU, max 40W	9926
2720	AC/DC PSU, max 40W	2721
3020	AC/DC PSU, max 60W	3021
2541	Lead Acid batt. charger, max 2,2A	2542
9940	Lead Acid batt. charger, max 2,3A	9941
2215	LiMH battery charger, max 35W	2216
9940 LI	Li.Ion batt. charger, max 2,3A	9941 LI
2541 LI	Li.Ion batt. charger, max 2,7A	2542 LI
2541 LiFePO <sub>4</sub>	LiFePO <sub>4</sub> batt. charger, max 1,3A	2542 LiFePO <sub>4</sub>
Additional housing weight (excl. plug/cord) + 27 g Tilleggsvekt (uten plugg/ledning) + 27 g		



**2-pin IEC 320 C7 mains cord**  
 1800 mm EU part no. 131306  
 UK part no. 131148, US part no. 131147, AU part no. 013108

