User's Manual

Video

■ Features :

- Charger for lead-acid batteries (flooded, Gel and AGM) and li-ion batteries (lithium iron and lithium manganese)(Note.1)
- Universal AC input / Full range
- 2 pole AC Inlet IEC320-C8
- Class Ⅱ power (without earth pin)
- No load power consumption <1.0W
- Constant current and voltage(CC,CV mode)
- Suitable for continue load
- For high surge current equipment
- Protections: Short circuit / Overload / Over voltage / Over temp.
- 2 colors LED indicate for charging status
- Fully enclosed plastic case
- High reliability
- Approvals: UL / CUL / TUV / EAC / CB / FCC / CE / UKCA
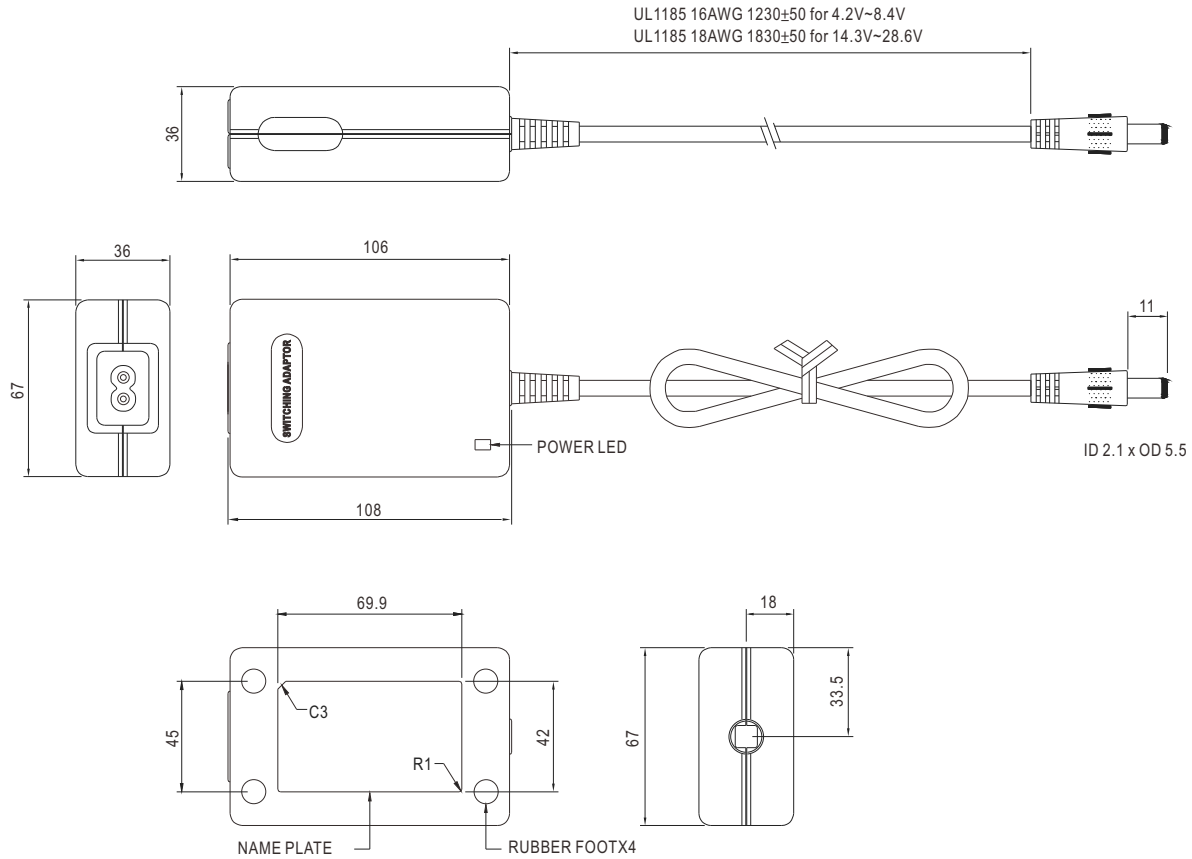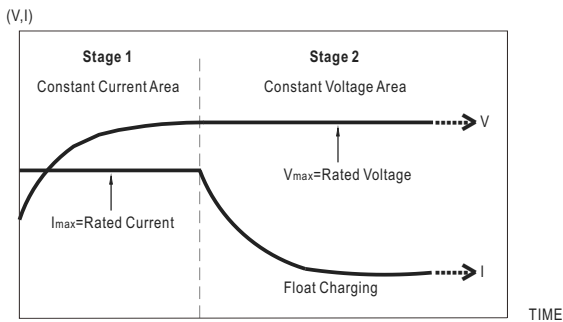- 2 years warranty

■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

c ᴜᴸus UL62368-1   GS BS EN/EN62368-1   EHC TPTC004   CB IEC62368-1   FC   CE   UKCA

SPECIFICATION

ORDER NO.		GC30B-0P1J	GC30B-1P1J	GC30B-11P1J	GC30B-2P1J	GC30B-4P1J	GC30B-5P1J	GC30B-6P1J
OUTPUT	SAFETY MODEL NO.	GC30B-0	GC30B-1	GC30B-11	GC30B-2	GC30B-4	GC30B-5	GC30B-6
	DC VOLTAGE SET AT Note.3	4.2V	5.6V	7.2V	8.4V	14.3V	16.8V	28.6V
	RATED CURRENT	4A	3.99A	3A	3A	2.09A	1.6A	1.04A
	CURRENT RANGE	0 ~ 4A	0 ~ 3.99A	0 ~ 3A	0 ~3A	0 ~ 2.09A	0 ~ 1.6A	0 ~ 1.04A
	RATED POWER	16.8W	22.38W	21.6W	25.2W	30W	27W	30W
	RIPPLE & NOISE (max.) Note.4	50mVp-p	50mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p
	CHARGING VOLTAGE RANGE Note.5	3.6 ~ 4.4V	5 ~ 5.8V	6.5 ~ 7.5V	7.7 ~ 8.6V	13.5 ~ 14.5V	16 ~ 17V	27.1 ~ 28.8V
	LINE REGULATION Note.6	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LED INDICATOR	Green LED ON < 100mA, Red LED ON > 250mA						
	SETUP, RISE, HOLD UP TIME	200ms, 50ms, 16ms at full load						
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	55%	70%	74%	76%	78%	78%	80%
	AC CURRENT	0.7A /100VAC; 0.35A/230VAC						
	INRUSH CURRENT (max.)	40A/230VAC						
	LEAKAGE CURRENT(max.)	0.25mA /240VAC						
PROTECTION	OVERLOAD	90 ~ 110% Constant current mode and over 300% pulsing mode						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed						
	OVER VOLTAGE	110 ~ 135% rated output voltage						
		Protection type : Clamp by zener diode						
	OVER TEMPERATURE	IC1_Tj > 130℃						
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
ENVIRONMENT	WORKING TEMP.	0 ~ +50℃ (Refer to output load derating curve)						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃ , 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC	SAFETY STANDARDS	UL62368-1, CSA22.2, BS EN/EN62368-1, EAC TP TC 004 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH						
	EMC EMISSION	Compliance to BS EN/EN55014-1 class B, FCC part 15 Class B, EAC TP TC 020						
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,11, light industry level, criteria A, EAC TP TC 020						
OTHERS	DIMENSION	108*67*36mm (L*W*H)						
	PACKING	309g; 54pcs / 19kg / CARTON						
CONNECTOR	PLUG	Standard type P1J: 2.1ϕ * 5.5ϕ * 11mm, tuning fork type center positive for stock ; Other type available by customer requested						
	CABLE	Standard type 18Awg UL1185 6ft and 4ft for 4.2V~8.4V output only for stock ; Other type available by customer requested						
NOTE		1.Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details. 2.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient. 3.DC voltage: The output voltage set at point measure by plug terminal & 0% load. 4.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 5.Output charging voltage range is measured from 0% to 100% rated load. 6.Line regulation is measured from low line to high line at rated load. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx						

■ **Mechanical Specification**

Unit:mm

UL1185 16AWG 1230±50 for 4.2V～8.4V
UL1185 18AWG 1830±50 for 14.3V～28.6V

36

36

67

106

SWITCHING ADAPTOR

□— POWER LED

108

11

ID 2.1 x OD 5.5

69.9

C3

45

42

R1

NAME PLATE

RUBBER FOOTX4

18

33.5

67

■ **Charging Curve**

(V,I)

Stage 1	Stage 2
Constant Current Area	Constant Voltage Area

····▶ V

Vmax=Rated Voltage

Imax=Rated Current

Float Charging

····▶ I

TIME

Suitable for lead-acid batteries (flooded,Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese)

■ **LED Display**

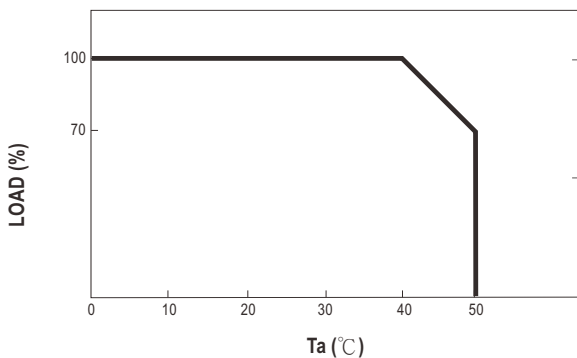| LED Status	Load Condition
Red	Charging
Green	Float Charging

■ **Plug Assignment**

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

■ **Derating Curve**

LOAD (%)

100

70

0   10   20   30   40   50

Ta (℃)

■ **Static Characteristics**

LOAD (%)

100

80

60

0   50   60 70 80 90 100   264

INPUT VOLTAGE