

# E-Star Power Development Co., Ltd. (E-STAR)

1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City

22069, Taiwan (R.O.C.)

Phone: 886-2-2957 5580 Fax: 886-2-2957 7473

### 30W Battery Charger Power supply> GC30U



### 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
- With USA type 6FT power cord(2pin)
- · Class II power (without earth pin)
- No load power consumption <1.0W</li>
- 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 / EAC / CB / FCC
- 2 years warranty



#### **SPECIFICATION** ORDER NO. GC30U-0P1J GC30U-1P1J GC30U-11P1J GC30U-2P1J GC30U-4P1J GC30U-5P1J GC30U-6P1J SAFETY MODEL NO. GC30U-0 GC30U-1 GC30U-11 GC30U-2 GC30U-4 GC30U-5 GC30U-6 DC VOLTAGE SET AT 5.6V 7 2 V 8 4V 14 3V 16.8V 28 6V Note.3 4.2V 3.99A ЗА 2.09A 1.6A RATED CURRENT 4A 3A 1.04A 0~4A 0~3A 0~1.6A 0 ~ 1.04A **CURRENT RANGE** 0~3.99A 0~3A $0 \sim 2.09A$ 30W RATED POWER 16.8W 22.38W 21.6W 25.2W 30W 27W OUTPUT 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 90 ~ 264VAC 127 ~ 370VDC **VOLTAGE RANGE FREQUENCY RANGE** 47 ~ 63Hz **EFFICIENCY (Typ.)** 55% 70% 74% 76% 78% 78% 80% INPUT AC CURRENT 0.7A / 100VAC: 0.35A/ 230VAC **INRUSH CURRENT (max.)** 40A / 230VAC LEAKAGE CURRENT(max.) 0.25mA / 240VAC 90 ~ 110% Constant current mode and over 300% pulsing mode **OVERLOAD** Protection type: Constant current limiting, recovers automatically after fault condition is removed 110 ~ 135% rated output voltage PROTECTION **OVER VOLTAGE** Protection type: Clamp by zener diode IC1 Ti > 130°C **OVER TEMPERATURE** Protection type: Shut down o/p voltage, recovers automatically after temperature goes down WORKING TEMP. 0 ~ +50°C (Refer to "Derating Curve") WORKING HUMIDITY 20% ~ 90% RH non-condensing STORAGE TEMP., HUMIDITY -20 ~ +85°C, 10 ~ 95% RH ENVIRONMENT TEMP. COEFFICIENT ±0.03% / °C (0 ~ 50°C) VIBRATION 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes SAFETY STANDARDS UL62368-1, CSA22.2, EAC TP TC 004 approved I/P-O/P:3KVAC WITHSTAND VOLTAGE SAFETY & I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH ISOLATION RESISTANCE **EMC** Compliance to FCC part 15 Class B, EAC TP TC 020 **EMC EMISSION EMC IMMUNITY** Compliance to EAC TP TC 020 DIMENSION 108\*67\*36mm (L\*W\*H) **OTHERS PACKING** 405g; 36pcs / 16.5kg / CARTON Standard type P1J: $2.1\phi * 5.5\phi * 11$ mm, tuning fork type center positive for stock; Other type available by customer requested **PLUG** CONNECTOR 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. 2.All parameters are specified at 115VAC input, rated load, 25°C 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.



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