TEST & MEASUREMENT INSTRUMENTS — DATASHEET

ET5406A+ / ET5407A+

ET5407A+ Series Programmable DC Electronic Load



OVERVIEW

The ET5407A+ series is an economical range of programmable DC electronic loads with high resolution and accuracy — 1 mV / 1 mA and 10 mV / 10 mA ranges — and superior performance. Nine working modes (four basic measurement modes plus five professional test modes) give a full test set, and the series is widely used for production-line testing of chargers, switching power supplies, linear power supplies and batteries.

FEATURES

- Four basic measurement modes: CC, CV, CR, CP — plus five professional test modes
- Battery test mode for discharge-capacity testing of all battery types
- Dynamic test mode for testing the dynamic output performance of power supplies
- Scan test mode, testing power-supply output continuity within a set range
- List test mode, simulating a variety of load-state changes
- Short-circuit test, simulating a load short circuit
- LCD segment display with adjustable backlight; simple, intuitive operation, easy to get started
- Key lock when connected remotely, preventing misoperation
- Built-in buzzer alarm; power-off data storage
- USB interface standard for remote operation; RS-232 or RS-485 optional (one of the two)
- Multiple protections: over-voltage, over-current, over-power and over-temperature protection, with over-voltage and over-current thresholds flexibly settable
- Intelligent fan speed control effectively reduces operating noise; input reverse-polarity prompt

SPECIFICATIONS

Item	ET5406A+	ET5407A+
Rated input power	200 W	200 W
Input voltage	0–120 V	0–180 V
Input current	0–20 A	0–30 A
CV mode range	0.1–19.999 V / 0.1–120.00 V	0.1–19.999 V / 0.1–180.00 V

Item	ET5406A+	ET5407A+
CV resolution	1 mV / 10 mV	
CV accuracy	±(0.05 % + 0.02 % FS)	
CC mode range	0–3.000 A / 0–20.00 A	0–3.000 A / 0–30.00 A
CC resolution	1 mA / 10 mA	
CC accuracy	±(0.05 % + 0.05 % FS)	
CR mode range	0.05 Ω–4.5 kΩ	
CR resolution	10 mΩ / 1 Ω	
CR accuracy	±(0.1 % + 0.5 % FS)	
CP mode range	0–200 W	
CP resolution	10 mW	
CP accuracy	±(0.1 % + 0.5 % FS)	
Dynamic test	CC / CV modes · T1 & T2: 0.05 s–99.999 s	
Battery test	Discharge in CC / CR modes · max. discharge capacity 9,999 Ah · resolution 1 mA / 10 mA / 10 mΩ / 1 Ω	
Voltage readback range	0–19.999 V / 0–120.00 V	0–19.999 V / 0–180.00 V
Voltage readback resolution / accuracy	1 mV / 10 mV · ±(0.05 % + 0.1 % FS)	
Current readback range	0–3.000 A / 0–20.00 A	0–3.000 A / 0–30.00 A
Current readback resolution / accuracy	1 mA / 10 mA · ±(0.05 % + 0.1 % FS)	
Power readback range	200 W	
Power readback resolution / accuracy	10 mW · ±(0.1 % + 0.5 % FS)	
Over-voltage protection	> 21 V / > 125 V	> 21 V / > 185 V
Over-current protection	> 3.1 A / > 21 A	> 3.1 A / > 31 A
Over-power protection	210 W	
Over-temperature protection	85 ℃	
Display	LCD segment display, adjustable backlight	
Interfaces	USB standard · RS-232 or RS-485 optional (one of the two)	

GENERAL SPECIFICATIONS

Power supply	100 Vac ±10 % – 240 Vac ±10 %, 50/60 Hz
	0 ℃ to 40 ℃ · relative humidity < 80 %

Operating temperature	
Storage temperature	−10 ℃ to 70 ℃
Dimensions	75 mm × 155 mm × 240 mm (W × H × D)

ACCESSORIES

- **Standard:** Three-core power cord × 1, Power fuses × 2, User manual × 1

Specifications are as published in the ET5407A+ series technical data sheet. Instruments are quoted per enquiry — contact with your voltage and current range for pricing and availability.