

TYPE \_\_\_\_\_ · DATE \_\_\_\_\_ · PROJECT \_\_\_\_\_

# VOL

Sage Central Battery — Auto Load Diagnostics

## Central Battery · Auto Load Diagnostics

500 – 1,000 W · 24 VDC · ≥ 90 min

### SUGGESTED SPECIFICATION

Install Sage Volta central-battery panels to supply from 500 W to 1,000 W emergency power at 24 VDC for at least 90 minutes. All systems shall include computer-based automatic self-test and self-diagnostic functions as required by NFPA 101 Life Safety Code, with a multicolor LED status display and automatic load diagnostics referenced to the commissioned load. Optional equipment shall include an LCD diagnostic control center with programmable test protocols and real-time clock, an installed printer producing written test reports, a fast charger restoring full capacity in under 12 hours, and power for switched / night or security lighting. Emergency-lighting fixtures may include Sage emergency luminaires, exit signs, and general-lighting LED luminaires fitted with a Sage Relay. Utility power input shall be 120 / 277 VAC, or optionally 347 / 480 VAC by transformer, with an optional second power input from a generator.

### ELECTRICAL SPECIFICATIONS

Computer-based central battery, 500–1,000 W, 24 VDC output, ≥ 90 minutes. Up to eight 24 VDC emergency branch circuits (2–4 conductors each, #18–#8 AWG, 1-hour-rated MC cable per NEC 700.9(d)(1)); loads may be Class 2. Two commercially available 12 V sealed-lead-acid batteries, removable in minutes without ladders or lifts. NEMA Type 1 / UL 50 steel enclosure (surface mount; optional recess). Two Sage Olympus local-circuit-monitor inputs standard (up to four). Side-panel status LED and push-to-test — full self-diagnostics with no network connection required.

### MODEL SPECIFICATIONS

Model	Standby · chg (W)	SEC opt. chg (W) <sup>1</sup>	Recharge std · CHG (hr)	Panel H × W × D (in)	Weight (lbs)	Battery (Ah)
VOL-500	20 · 45	300 · 650	72 · 10	24 × 30 × 8	112	50
VOL-1000	20 · 45	550 · 1,150	90 · 12	24 × 30 × 8	161	100

<sup>1</sup> SEC = max AC with the optional security-lighting supply operating; standard charging · with CHG fast charge.  
Recharge: standard · with CHG option. Weight includes both batteries. Sizes for 120 VAC input — contact factory for other inputs.

### PRODUCT DATA · INPUT

AC Input	120 / 277 VAC (opt. 347 / 480 via XFMR)
DC Output	24 VDC, ≥ 90 min
Emergency Power	500 – 1,000 W
Branch Circuits	up to 8 (2–4 cond., #18–#8 AWG)
Batteries	2 × 12 V SLA (front-removable)
Monitor Inputs	2 × Sage Olympus (up to 4)

### FEATURES

- Auto Load Diagnostics — every test compares connected load to the commissioned datum; a change greater than 10% raises a fault
- Automatic monthly self-test + annual discharge test (NFPA 101 §7.9.3) — multicolor status LED; no network required
- Side-panel push-to-test + status LED — test and read system status without opening the door
- Optional LCD diagnostic control center — fault history; battery charge, voltage, load, temperature; RT-clock test scheduling
- Optional fast charger (CHG) — full recharge in under 12 hours

### TEMPERATURE

Operating Temperature	–20° to +50° C (standard)
With Battery-Heater (BH) option	–40° to +50° C

### ORDERING INFORMATION

Model	VOL
90-min Watts	500 · 1000
AC Volts	120 · 277 · 347 · 480
Options	LCD display + RT clock · BCM branch monitor · PRT printer · CHG fast charge · GEN120/277 generator · S(X) security 75–1000 W · ECR relays (1–6) · OCM monitor inputs (3–4) · FAI fire-alarm · BMI bldg-mgmt · ASA active-shooter · FEMA fan (1000 W) · CDO concealed-door · RT remote test · TD time delay · T time clock · NAT no auto-test · BH battery heater · LOK key lock · NEM4 weatherproof

**Ordering Example: VOL-1000-120-LCD-PRT-LOK**

### UL CONDITIONS OF ACCEPTABILITY

Listed under UL Standard 924; meets applicable requirements of CSA C22.2 No. 141, NFPA 101, and NEC 700.12(c). cETLus (US + Canada). Designed and made in the USA. As a storage-battery system per NEC 700.9, install in spaces with an approved automatic fire-suppression system or a 1-hour fire-resistance rating.

NOTE: Maximum 40 exit signs per central battery.

NOTE: Branch wiring: exits-only 2-wire · EM-only 2-wire · exits + EM 3-wire · + security 4-wire. Wiring colors: exit signs Yellow & Black; emergency Red / Black / Blue (if security); CDO Black / Yellow / Red.

*“Engineered for the spaces it protects.”*