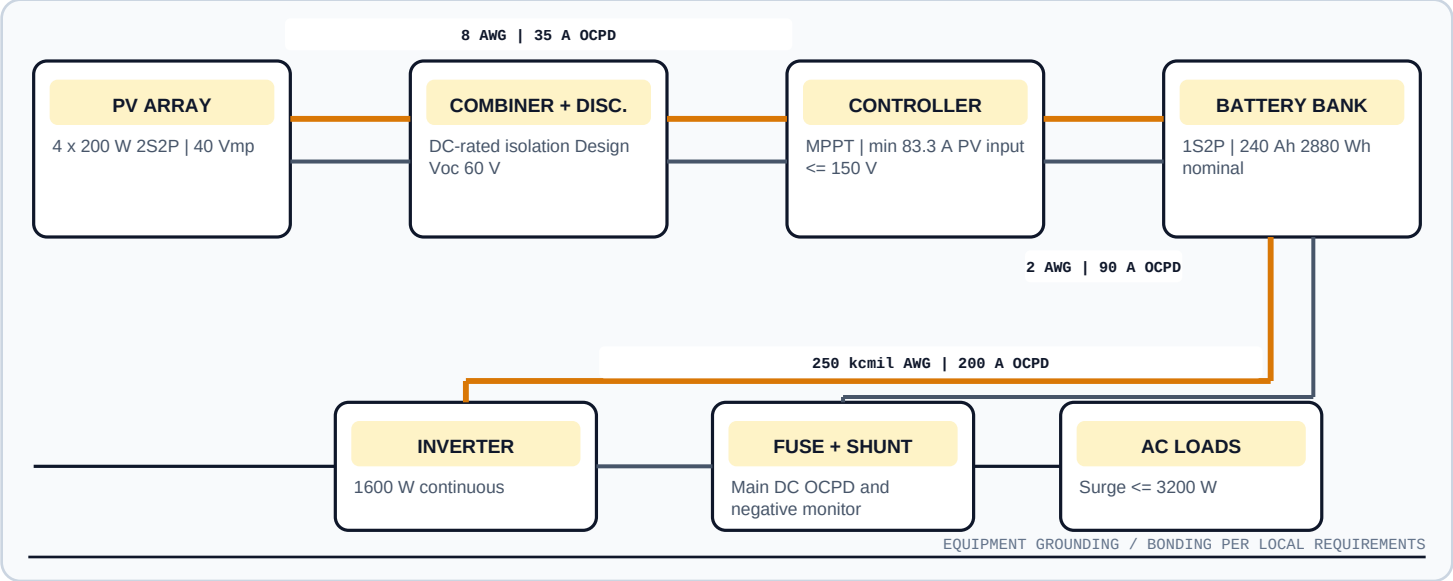
OFF GRID AUTHORITY

ONE-PAGE SOLAR WIRING PLAN

PROJECT 0769B12AFE

FREE DIAGRAM

ARRAY	SYSTEM	BATTERY	INVERTER
800 W | 2S2P	12 V DC	1S2P | 240 Ah	1600 W



WIRE AND OCPD SCHEDULE

RUN	ONE-WAY	CONDUCTOR	CURRENT	DROP	OCPD
Array Controller	17 ft	8 AWG CU	32.8 A	2.17%	35 A
Controller Battery	5 ft	2 AWG CU	66.7 A	1.08%	90 A
Battery Inverter	6 ft	250 kcmil AWG CU	148.1 A	0.76%	200 A

PLANNING DOCUMENT - NOT A PERMIT SET

This conceptual plan is generated from the inputs shown. Verify equipment manuals, terminal temperature ratings, conductor insulation, environmental derating, local amendments, grounding, bonding, rapid shutdown, and permit requirements with the authority having jurisdiction before purchase or installation.

CALCULATION BASIS

NEC 2023 Table 310.16 (60 C column); Chapter 9 Table 8; 240.6(A); 690.7; 690.8. Design values do not replace adopted-code review.