

OFF-GRID SOLAR SYSTEM

Challenger Series

MODEL NUMBER 020-A-OGS

COMPONENT DATA

SOLAR PANELS

MAKE / MODEL	Q Cell / Q.Tron XL-G2.3 / BFG 630W
WATTAGE (STC / BSTC)	630 STC
TOTAL NUMBER OF PANELS	20

INVERTER

MAKE / MODEL	Sol-Ark / 12K-2P-LL
MAX. ALLOWABLE DC INPUT VOLTAGE / CURRENT (FROM PV)	500 Volt / 96 Amp
MAXIMUM AC OUTPUT WITH GRID CONNECTION	12.0 kW
CONTINUOUS AC OUTPUT WITHOUT GRID CONNECTION	10.0 kW
NUMBER OF INVERTERS	1
AC VOLTAGE / PHASE / FREQUENCY	240 Volts / Split Phase / 60 Hz
DC VOLTAGE TO BATTERIES	48 Volts
RECOMMENDED OPERATING TEMPERATURE RANGE	-40 to +140 Deg. F -40 to +60 Deg. C

BATTERY & CABINET

MAKE / MODEL	SOK / SK48V100N
CHEMISTRY	Lithium Iron Phosphate (LiFePO4)
VOLTAGE	48 Volt
CAPACITY	5.1 kWh
NUMBER OF BATTERIES	4
NUMBER OF BATTERY CABINETS	1
BATTERY CABINET CLIMATE CONTROL	Insulated & Thermostatically Controlled (Heated & Fan Cooled)
BATTERY OPERATING TEMPERATURE RANGE*	-4 to +122 Deg. F -20 to +50 Deg. C

ASSEMBLED SYSTEM ELECTRICAL DATA

COMPLETE SYSTEM

RATED DC POWER	12.60 kW
DC VOLTAGE / CURRENT (COMBINED STRINGS)	319 Volts / 43.7 Amps
MAXIMUM AC OUTPUT WITH GRID CONNECTION	12.0 kW
CONTINUOUS AC OUTPUT WITHOUT GRID CONNECTION	10.0 kW

AC VOLTAGE / MAX CURRENT (COMBINED INVERTERS, IF APPLICABLE)	240 Volts @ 50.0 Amps
PHASE / FREQUENCY	Split Phase / 60 Hz
BATTERY BANK DC VOLTAGE	48 Volts
TOTAL BATTERY CAPACITY	20.4 kWh

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