

POWER OASIS™ MEDICAL

Isolated power that moves with your OR.

Portable power station designed to NFPA 99 Category 1* isolated power requirements — hospital-grade isolation transformer, line isolation monitoring, and online UPS* in a single cart.

- **NFPA 99 Category 1*** isolated power architecture[4]
- UL 60601-1* isolation transformer
- **Line Isolation Monitor** — alarm at ≤5mA* hazard current
- **Online UPS*** — no transfer time
- **~3h 27m @ 1,000W**

48	100	4800	~1,440	6×	~3h 27m
V	Ah	Wh	W		@ 1,000 W
SYSTEM VOLTAGE	CAPACITY	STORED ENERGY	ISOLATED OUTPUT	HOSPITAL-GRADE OUTLETS	OR RUNTIME

OR RUNTIME AT LOAD

Coverage for the clinical scenarios that matter

OR Load	Runtime	Clinical Context
500W	~6h 54m	Anesthesia monitor · infusion pump · lighting
750W	~4h 36m	Multi-device light OR load
1,000W	~3h 27m	Typical mixed OR* — anesthesia + monitor + ESU
~1,440W	~2h 24m	Rated continuous maximum

At 80% DoD · 90% combined efficiency · 100Ah battery. Lightweight 60Ah configuration planned (~30 lbs · ~2h 04m @ 1,000W). Designed as backup for unexpected outages — recharges in ~6.7 hrs.

KEY SPECIFICATIONS

Energy	**4,800 / 3,456 Wh** Gross / usable AC	**Recharge**	**~6.7 hrs** 15A DC integrated charger
Inverter	**48/3000** Online UPS*	**Outlets**	**6 hospital-grade outlets** on inline transformer · ~1,440 W total across all outlets
Isolation transformer	**~1,440 W continuous** UL 60601-1 3rd ed*	**AC input**	**15A DC charger · HG plug**
Output leakage	**<100 µA*** Faraday shield · NFPA 99* limit	**EMI filter**	**medical** <2µA* leakage — B-type
Line isolation monitor	**≤5mA* alarm** Visual + audible · front panel[5]	**Enclosure**	**5052-H32 aluminum** wipe-clean
Battery	**48V 100Ah LiFePO4** ~75 lbs[2] · 60Ah lightweight option	**Weight**	**~214 lbs[2]** Verify facility placement policy

*[2] Estimated — pending vendor confirmation. [4] Compliance path under regulatory review — see notices. [5] LIM make/model selection in progress. * Future certification or in development and testing.*

ISOLATED POWER ARCHITECTURE — NFPA 99 CATEGORY 1*

Why each element exists and what it protects

Element	Component	Function
Isolation transformer	Hospital-grade transformer	Breaks ground reference
Line isolation monitor	LIM (model TBD[5]) · front panel	Monitors isolation integrity · alarms ≤5mA* · powered from isolated output side per NFPA 99*
Output leakage	<100µA*	Transformer Faraday shield
No GFCI on OR outlets	Intentional design	GFCI would cut ALL OR power on first fault — defeats isolated power purpose
Online UPS*	Online inverter/charger	Inverter runs continuously — no transfer time
Fuse monitoring	DC distribution + CAN bus	Blown DC fuse → visible system display alarm

ADDITIONAL SPECIFICATIONS

Complementing key specifications on page 1

Rated output	3,000 VA · 5,000 W surge inverter/charger	**Transformer weight**	~58 lbs Two-person install lift
Max discharge	0.33C At ~1,440 W · 67% headroom to 1C	**Cooling**	2× 120mm fans
Charge voltages	54.75 / 52.0 V DC LiFePO4 absorption / float	**Input plug**	Hospital-grade plug
Efficiency	~93% inverter · ~97% transformer Combined ~90%	**Operating temp**	−10 to +40 °C Hospital environment

WARRANTY & SUPPORT

Coverage	Details
Product warranty	2 years parts/labor (target) · 5 years battery and power electronics (target)
Annual service	LIM verification · leakage measurement · battery health — included year 1
Remote diagnostics	Cloud monitoring — biomedical team and our support see identical live data
Compliance docs	Complete NFPA 99* documentation package planned

⚠ IMPORTANT NOTICES

- CONCEPT STAGE — NOT for clinical use. NFPA 99* compliance path under regulatory review; deployment pending confirmation.
- EMI filter is medical B-type exclusively — standard filters violate leakage limits.
- No GFCI on OR outlets is intentional — see architecture above.

* Future certification or in development and testing.

Planning an OR renovation or resilience program?

Concept Stage — specifications preliminary and subject to change — not released for production sales@trifectaengineering.com