Off-grid Generator

Hybrid Solar-Storage-Diesel Microgrid System

24 kW inverter | 42 kWh LFP battery | 18 kW generator



PRODUCT SNAPSHOT

HYBRID INVERTER	24 kW
BATTERY CAPACITY	42 kWh
DIESEL GENERATOR	18 kW
ONBOARD SOLAR	2 kW
EXPANDABLE SOLAR	27 kW

24 kW
INVERTER

42 kWh
LFP STORAGE

18 kW
GENERATOR

1.7 t
TRAILER-READY

System highlights

Remote-ready design

System-level operating range -30 C to +55 C; weather-protected enclosure.

Mobile microgrid

Trailer-ready system with deployable solar panels and 1.7 t weight.

Scalable solar

2 kW onboard, expandable up to 27 kW with MPPT inputs.

Smart hybrid EMS

On/off-grid switching, UPS functionality and cloud monitoring.

Ideal for Canadian Applications

Remote and Indigenous communities; mining, forestry and construction camps; emergency and disaster response; off-grid lodges, research stations, parks, farms and seasonal operations.

Source brochure estimates 40%-70% diesel fuel savings; actual results depend on site conditions and dispatch.

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Technical Specifications

Hybrid Solar-Storage-Diesel Microgrid System

BATTERY & INVERTER	
Battery type / capacity	Automotive-grade LFP / 42 kWh
Cycle life	>= 4,000 @ 80% DOD, 25 C
Thermal management	Liquid cooled and heated
Depth of discharge	90%
Battery temperature range	-20 C to +60 C
Inverter / output	24 kW hybrid / 120-240 V, 60 Hz
Inverter efficiency / protection	CEC 96.4% / IP65
THDI	< 2%

SOLAR & DIESEL GENERATOR	
Onboard PV / module efficiency	2 kW / 23.3%
Solar expansion	Up to 27 kW (3 x 9 kW MPPT)
PV input	4 x MPPT (150-430 V)
Diesel generator	Cummins 25 kW engine / 18 kW generator
Fuel tank / consumption	180 L / 6.1 L/h at full load
Generator noise	75 dB(A) at 7 m

PHYSICAL & COMPLIANCE	
Dimensions (W x D x H)	3,530 x 1,130 x 1,880 mm
Weight / protection	1.7 t / IP54, C5 corrosion resistant
System temperature / altitude	-30 C to +55 C / <= 4,500 m
Listed standards	UL 1973, UL 9540, UL 9540A, UL 1741
Other listed standards	CSA C22.2 No. 62133, FCC Part 15, UN 38.3

Specifications and listed standards are taken from the supplied brochure. Current certificates and approval status have not been independently verified.

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