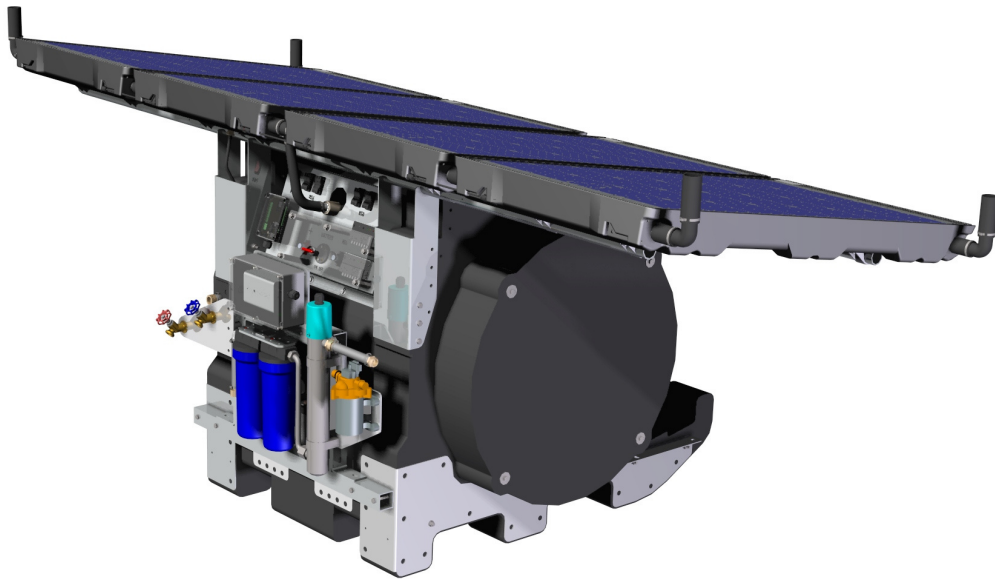


# Gen<sub>2</sub>

PORTABLE

Solar Powered  
Electricity Hot Water • Water Filtration



Emergency Response  
Humanitarian Aid  
Off-Grid Living



From Box to Operational  
in less than 2 hours



The Ukraine War has been devastating for its people since the onset in February 2022. The Rocky Mountain Aid Foundation deployed two Gen<sub>2</sub>O portable units to support both front line responders and humanitarian efforts.



Solar Powered  
Electricity, Hot Water, Potable  
Water in one device.



**PORTABLE**

Video from Ukraine  
with English Subtitles



On September 16, 2017, a Category 5 hurricane Maria devastated the northeastern Caribbean, particularly Puerto Rico. Good 360 along with Crisis Response International and RG Resource Technologies, sent a Gen<sub>2</sub>O portable to Dos Bocas, a community in the mountains.

Three families homes  
shared the electricity  
the Gen<sub>2</sub>O supplied  
through solar power.

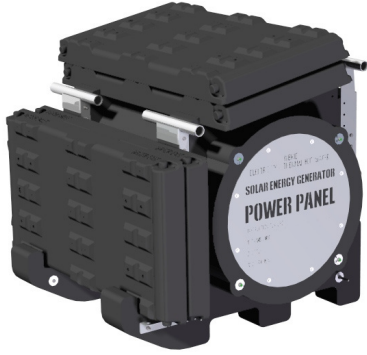


The community of 24  
enjoyed hot showers thanks  
to the Gen<sub>2</sub>O's capacity to  
heat and store hot water.



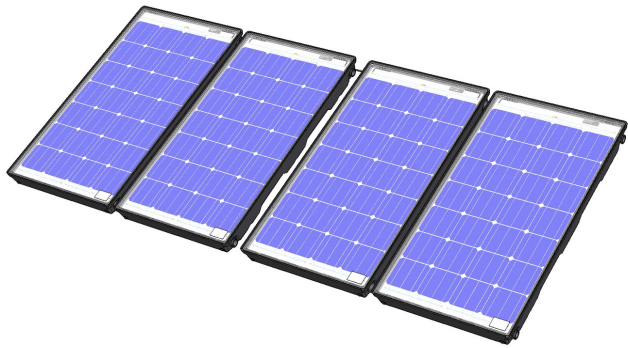


# Dimensions and Capacities



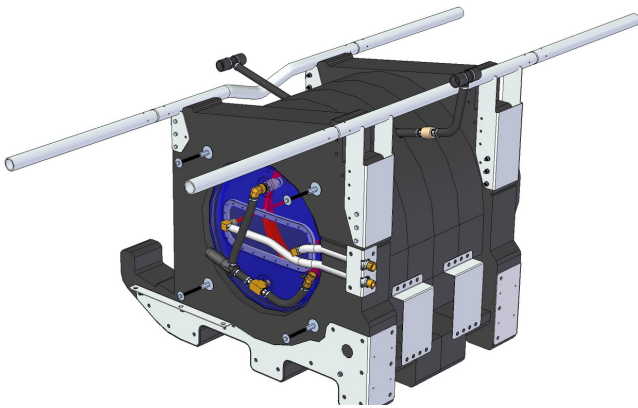
Reference Part Number	PPGM0104.04
Deployed Dimensions	56 x 121 x 54 inch tall [ 1,422 x 3,073 x 1,372 mm ]
Stowed Dimensions ( Local Transport )	56 x 52 x 52 inch tall [1,422 x 1,321 x 1,321 mm ]
Fork Truck Lift Access - Rear of Unit	6 inch wide fork maximum - 24 inch outer width
Pallet Jack Access - Side of Unit	28 inch wide - dual 10.5 inch wide slots
Overhead Crane Lift Capability	YES with assembly in Dry Weight Condition
Dry Weight ( no fluid )	450 lbs [ 204 kgs ]
PVT Module weight ( 4 pcs )	52 lbs x 4pcs = 208 lbs [ 94.5 kgs ]
Unit Weight- Modules Removed	242 lbs [ 110 kgs ]
Operational Weight ( filled with water - 50 gal )	891 lbs [ 404 kgs ]
Shipping ( single unit)	60 x 60 x 60 inch wood palletized crate - 720 lbs
Shipping (volume purchases - Knock Down Kit)	20 units per 40 foot ISO Container - 10,250 lbs

## Energy Generation and Storage



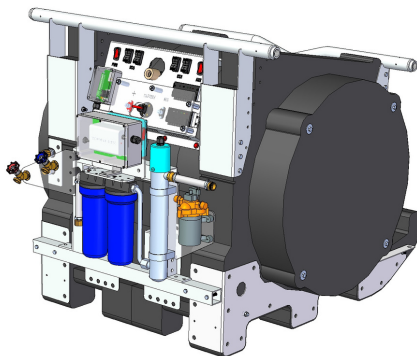
Electrical Generation DC peak at STC	540 Watts
PV Cell	HJT N type - 28 cells in series per module
Module Voc	19.1 Volts DC
Module Isc	9.38 Amps DC
Electrical Energy Storage	2,400 Watt hour - Two 12 volt AGM in parallel
Electrical Charge Control	Two Morningstar SS-20L ( PWM Type )
Thermal Generation ( peak Delta T = 0 )	2,540 Watts
Module Intercept per ISO 9806	0.751
a 1 slope per ISO 9806	3.570 Watts per m2 deg K
Thermal Energy Storage Tank Volume	52 gal [ 200 liters ]
Storage Type	Unpressurized
Max Rated Storage Temperature	80 deg C [ 176 Deg F ]
Energy Storage	8,100 Watt hour at 35 deg C Delta T

## Construction



Structure and Insulation	Expanded Polypropylene Foam ( EPP ) Density = 48 gram per liter [ 3 PCF ] Insulation Value Thermal Storage System = R24
Thermal Storage Tank	Rotomolded Polyethylene
Heat Exchanger	Four -Parallel Loops PEX Tubing - 400 ft x 3/8 inch
Racking	Schedule 40 aluminum Pipe - 4 removable sections
Mounting and Attachment brackets	0.125 inch 3004 aluminum
Thermal Control	Embedded Control WiFi enabled Microprocessor
Control Type	Differential Temperature
Monitoring Type	Web based MQTT architecture 12 VDC - Washdown Rated
Thermal Circulation Pump	Carling V Charger : USB type 2 - 8 Charge Ports
Electrical Accessories	Switch controlled 20 amp AUX cable

## Water Filtration and Distribution



Water Filtration Module Reference Part Number	PPPL0532.0
Primary Filter	5 micron sediment
Secondary Filter	5 Micron Activated Carbon
UV Sterilization	Wyckomar UV250
UV Dosage	40 mJ/cm2 at 4.2 GPM [ 15.9 LPM ]
Water Intake Pump	12 VDC - 9 ADC Stainless Well Pump
Pump Output	4 GPM [ 15.1 LPM ]
Pump Hose	1/2 inch PEX tubing
Water Distribution Pump	12 VDC Pressure Demand
Pump Output	3.2 GPM [ 12.1 LPM ]
Distribution Hoses	Three - 25 foot high purity 3/4 inch hoses
Hose Connections	3/4 inch Garden Hose Thread