SolarX Works, LLC

Technical Assistance Request

Version 1.0
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Solar X Works: A Quick Introduction

The foundation of our first market offering (AKA our Minimum Viable Product or MVP), is what we characterize as the DC Cooling system… our patent pending SXW **xCOLD** Platform.

Through thoughtful design and smart software our cooling system uses direct current (DC) straight from a power source such as (in this case) solar panels (although other DC-power sources could also be used) to create a cold atmosphere that can be applied throughout many different use cases. Our current proof of concept is on its second generation.

Prototype operating specifications (current scope)

Below is a list of design requirements for our field operable unit.

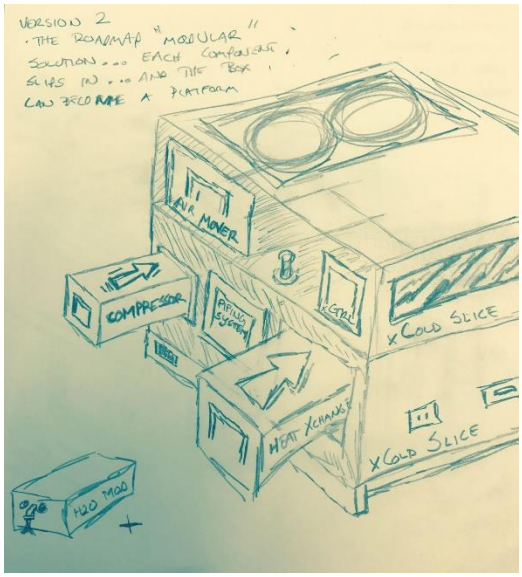
1. Can support 24,000 BTUs of output
2. Must leverage a Direct Current (DC) Variable Speed Scroll Compressor
3. Between 2- and 5-Tons Cooling Capacity
4. Support freezing / cooling down to 17 degrees F
5. Must be able to fail-over to an alternate power source (such as battery or shore power) leveraging our proprietary control schema
6. Expected size: 3'X3'X3' for the field unit
7. Must have our integrated control board and Internet of Things (IoT) beacons and sensors – integrated cellular access for remote control and management
8. Must have integrated battery solutions
9. Would like to have modular heat exchanger designed and capable of field test
10. Must run continuously / uninterrupted (except via our automated controls) for 30 days.

Specific Request for Technical Assistance:

There are a series of things that Solar X Works is seeking to partner on.

These include support for our:

1. The finalization of a modular "slice" design. The xCold unit will ultimately be a set of building blocks that can be easily assembled (snapped together) in the field. The design concept is similar in nature to a modern computer server. Each significant component will be a self-contained and easily installed unit. This is not necessary for our field test.



2. The development of a controlled atmosphere module which will provide for a means to “create” and use an alternative refrigerant (we wonder if there is a means to use a molecular sieve for this purpose and / or transitioning from Oxygen to Nitrogen to promote produce preservation).
3. The selection of phase change materials for thermal mass to provide a mechanism for energy storage.
4. The selection or creation of next generation alternative refrigerants (different than point two).
5. The development of a highly efficient DC driven scroll compressor.

We are working against the following schedule.

100K Plan and Schedule

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Business / Admin												
Raise funds					M1 Milestone 1 - Have we raised enough to support prototype?							
Marketing Analysis						M2 Milestone 2 - Have we validated the market dimensions?						
Engineering												
Engineering Analysis					M3 Milestone 3 - Engineering team sign off							
Design						M4 Milestone 4 - Engineering / Marketing Team sign off						
Build								M5 Milestone 5 - Engineering / Marketing Team sign off				
Field Test										M6 Milestone 6 - Engineering / Customer Team sign off		
Legal												
Patent Completion												
Trademark Completion												
Reorganization												