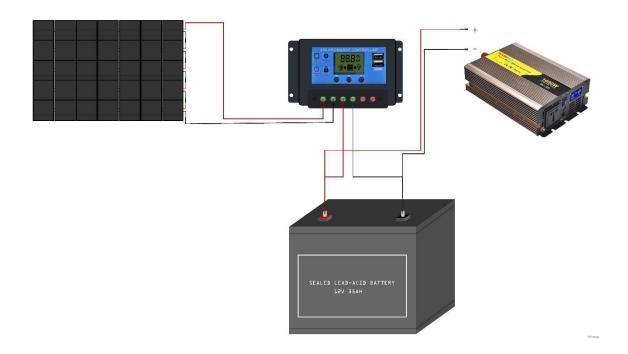
APPENDIX A

Appendix A: Circuit Diagram



APPENDIX B1

Appendix B1: Specifications 12V 500-Watt Pure Sine Wave Inverter

Specification

• • • • • • • • • • • • • • • • • • • •	
Model	ATO-PSWI-5001
Output Power	500 Watt
Peak Power	1000 Watt
Input Voltage	DC 12V
Outlet Type	Universal socket *1
Input Voltage	DC 12V (9.5-15.5V)
AC Output Voltage	1- Phase (L + N, G)= 110V, 230V ±5% Do Not provide split phase configuration (L1, L2 + N, G)
No-load Current (less-than)	s0.4A
Output Frequency	SOHz or GOHz
Output Wave	Pure Sine Wave
Waveform Distortion	THDS3%
USB Port	5V, 2.1A
Max Working Efficiency	95%
Undervoltage Protection	First alarm (breaking alarm sound is one), LED red light flashes, voltage continues to decrease and shut down
Overload Protection	Continuous alarm, LED flashing red, off
Over Temperature Protection	First alarm (broken alarm sound is two), the temperature continues to rise, LED red light flashes and turns off
Short Circuit Protection	Short circuit protection without breaking the circuit
Reverse protection	Fuse blown
Undervoltage Alarm Range	10.5±0.5V
Undervoltage Protection Range	9.5±0.5V
Overvoltage Protection Range	15.5±0.5V
Undervoltage Recovery Range	13±0.5V
Overvoltage Recovery Range	14V±0.2V
Operating Temperature	-10°C~ +50°C
Cooling Way	Intelligent cold wind
Warranty	12 Months
Storage Temperature	-30°C∼ +70°C
Humidity	≤90%, non-condensing
Dimensions (W*H*D)	260mm*115mm*59mm
Grass Weight	1.7kg
Accessories	2 Pure copper connection wires + 4 spare fuses

APPENDIX B2

Appendix B2: Specifications 50-Watt 12 Volt Monocrystalline Solar Panel

SPECIFICATIONS										
Output Cables: 1.31 ft	Connectors: solar Connectors									
Maximum Power: 50W	Maximum System Voltage: 600V DC (UL)									
Optimum Operating Voltage (Vmp): 18.6V	Open-Circuit Voltage (Voc): 22.3V									
Optimum Operating Current (Imp): 2.69A	Short-Circuit Current (Isc): 2.94A									
Weight: 7.72 lb / 3.5 kg	Dimensions: 22.9 x 20.0 x 1.2 in									
Operating Temperature: -40°F to 194°F(-40°C to +90°C)	Panel Leads (Pair): 14AWG (4 m / 1.3 ft long)									

APPENDIX C1

Appendix C1: Gantt Chart Semester 4

		GANTT CHART FOR SEMESTER 4																		
Activity	Project	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Find Supervisor	Plan											Α								
	Actual											С								
	Plan											Т								
	Actual											1								
Make investigation of project	Plan											V								
	Actual											1								
Pre-presentation	Plan											Т								
	Actual											- 1								
Journal	Plan											Ε								
	Actual											S								
Gantt chart	Plan																			
	Actual																ı			
Literature review	Plan																L			
	Actual																			
Methodology	Plan																			
	Actual																			
Final Presentation	Plan															L				
	Actual																			
Submission the presentation rep	Plan											W								
	Actual											Е								
Supervisor Signature												Е								

APPENDIX C2

Appendix C2: Gantt Chart Semester 5

GANTT CHART FOR SEMESTER 5																			
Activity	Project	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Update Latest Report & Drawing	Plan Actual											A C							
Purchase Material	Plan Actual											T I							
Prepare Equipment Operation	Plan Actual											V							
Preparing Documentation Chapter (4	Plan Actual											T I							
Measuring Material Based on Drawi	Plan Actual											E S							
Cutting Material, Welding, Fabricate	Plan Actual																		
Chapter 4: Result And Analysis	Plan Actual																		
Chapter 5: Discussion	Plan Actual																		
Meeting With Supervissor	Plan Actual																		
Presentation	Plan Actual											W E							
Submit Report Chapter (4, 5, 6)	Plan Actual											E K							