Product Specs

Operating temp- 40*c- 60*c
There are seven main components in the controller's enclosure. These are:
AEI RF Reader
Cellular Modem
Ethernet Switch
Terminal Block
12 VDC Power Supply or 24 VDC to 12 VDC converter
5 VDC Power Supply or 24 VDC to 5 VDC converter
The 120/240 VAC version of the system uses the 12 VDC and 5 VDC power supplies.
There are six cable connections that must be made with the Controller. The following is the list of connections:
Near antenna 1 coaxial cable (connector is N-Female)
Far antenna 2 coaxial cable (connector is N-Female)
Ground stud
120 VAC power cable
M-Gage presence sensor four wires to terminal block
Cellular modem antenna
The Solar Reader Solar System shipment contains the following items:
Two external antennas and pole mounting brackets (one has a M-Gage presence sensor attached)
One Solar Reader Board mounted in the SunWize enclosure (which includes the AEI RF reader, cellular modem, 12 VDC to 5 VDC converter)
One 10 foot and one 40 foot coaxial cable
Two test AEI tags
SunWize Solar System (which includes enclosure, battery, solar panel, control panel and mounting hardware)
Characteristics:

Max power (Pm) – 90W	
Nominal Voltage – 12V	
Maximum system voltage – 600V	
Dimensions – 47.4in(1204mm)x21.2in(537mm)x1.97in(50mm)	
Operating Temperature – -40*C- 90*C	
Controller Specs:	
Max Battery & Load Current – 15	
Additional Specs:	
Operating Temperature -40*C- 90*C	
Self Power Consumption – 20 milliamps	
Battery Voltage Range – 10-35	

Terminal Assignments

Terminals are numbered from left to right. GPIO references the connector on the reader.

Description System Side	Wire Color Top	Terminal Number	Wire Color Bottom	Description Device Side	Cable Pin Assignments
+12 VDC From Solar Battery	Red	1	Brown	+12 VDC	**M-Gage Pin 1 (presence)**
Ground From Solar Battery	Black	2	Blue	RadarPower Ground	**M-Gage Pin 3 (presence)**
Sagas Digital Input 0	Jump to GPIO 6 Blue	3	Black	Digital Input Positive	**M-Gage Pin 4 (presence)**
Sagas Digital Output 0	Jump to GPIO4 Yellow	4	Gray	Digital Output	**M-Gage Pin 5 (presence)**
+12 VDC	Jump to GPIO2 Red	5			
Ground	Jump to GPIO7 Black	6			

Sagas Digital Input 1	Jump to GPIO5 White	7			
Sagas Digital Output 1	Jump to GPIO3 Green	8			
+ 5 VDC From 12 VDC to 5 VDC Converter	Black with White Strip	9	Red	Power Plug	
Ground	Black	10	Black	Power Plug	
+ 5 VDC From 12 VDC to 5 VDC Converter	Black with White Strip	11	Red	CellularModem Power Plug	
Ground	Black	12	Black	Cellular Modem Power Plug	