

## 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 Denali Reader Solar System shipment contains the following items:**

Two external antennas and pole mounting brackets (one has a M-Gage presence sensor attached)

One Denali 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)

## 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
<b>+12 VDC From Solar Battery</b>	Red	1	Brown	+12 VDC	<b>M-Gage Pin 1 (presence)</b>
<b>Ground From Solar Battery</b>	Black	2	Blue	RadarPower Ground	<b>M-Gage Pin 3 (presence)</b>
<b>Sagas Digital Input 0</b>	Jump to GPIO 6 Blue	3	Black	Digital Input Positive	<b>M-Gage Pin 4 (presence)</b>
<b>Sagas Digital Output 0</b>	Jump to GPIO4 Yellow	4	Gray	Digital Output	<b>M-Gage Pin 5 (presence)</b>
<b>+12 VDC</b>	Jump to GPIO2 Red	5			
<b>Ground</b>	Jump to GPIO7 Black	6			
<b>Sagas Digital Input 1</b>	Jump to GPIO5 White	7			
<b>Sagas Digital Output 1</b>	Jump to GPIO3 Green	8			
<b>+ 5 VDC From 12 VDC to 5 VDC Converter</b>	Black with White Strip	9	Red	Power Plug	
<b>Ground</b>	Black	10	Black	Power Plug	
<b>+ 5 VDC From 12 VDC to 5 VDC Converter</b>	Black with White Strip	11	Red	CellularModem Power Plug	
<b>Ground</b>	Black	12	Black	Cellular Modem Power Plug	