Solar Module – 30 Watt
Voc – 21.9 V
Vpm – 17.3 V
Ipm – 1.77 A

Antenna 1

Antenna 2

Power Distribution Block
1 input – solar module
3 outputs
Output 1 – charge controller
Output 2 – Micromate or Series III/IV
Output 3 - extra

Solar Module voltage should be measured at all 3 outputs

Micromate 15 W Converter
Input 8-22 Volts
Output 5 Volts

4.5 Amp solar charge controller
Yellow – Solar (+)
Black – Solar (-)
Red – Battery (+)
Black – Battery (-)

USB to Serial Modem Cable

Battery
Positive (+)

12 Volt Battery
Provides power to the modem

Battery
Negative (-)

RV50 Modem
See page 2 for details

Modem Power (+)

Modem Power Cable

Modem Power (-)

1 Amp Fuse

10 Amp Fuse

V3 Wiring Diagram
Cory Loukides
9/25/2017

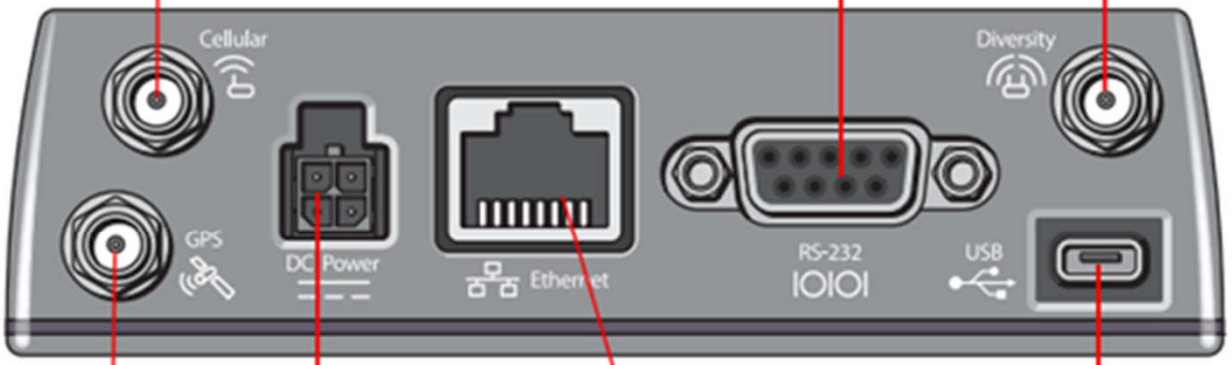
MODEM DETAILS

Back Panel

Cellular Antenna Connector
Connect Antenna 1

9-pin RS-232 Serial Port
Connect Modem Cable

Diversity Antenna Connector
Connect Antenna 2



GPS Antenna
NOT USED

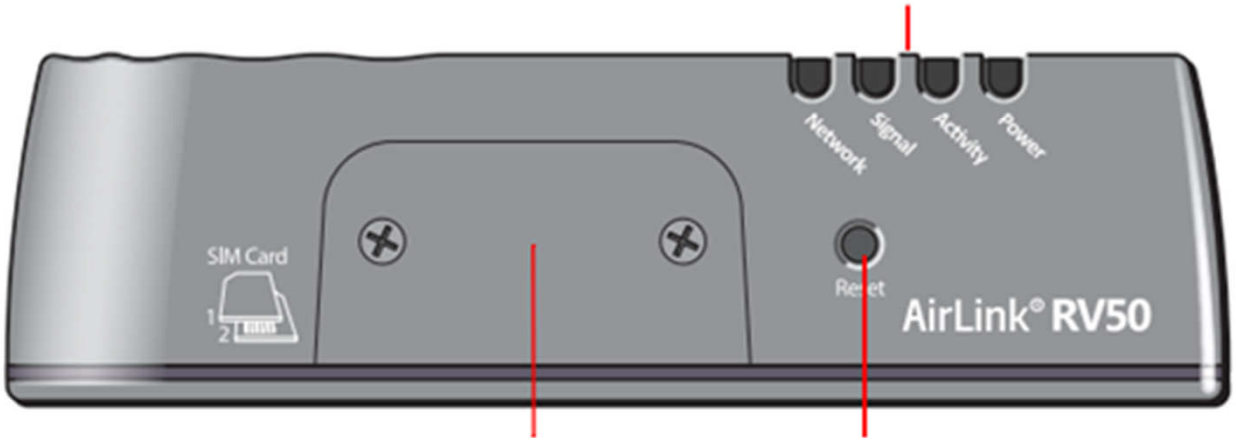
Power Connector
Connect Modem Power Cable from Timer

RJ-45 Ethernet Connector
PRO Series ONLY

USB 2.0 Micro-AB Port
NOT USED

Front Panel

LED's – see page 3 for details



SIM CARD HOLDER
DO NOT OPEN

Reset Button
DO NOT PUSH

V3 Wiring Diagram
Cory Loukides
9/25/2017

MODEM LED DETAILS

LED	Color/Pattern	Description	LED Power Saving Mode[a]
Power	**Off**	No power or input voltage ≥ 36 VDC or ≤ 7 VDC	
	Solid Green	Power is present.	
	Green with Amber Flash	Power is present and the gateway has a GPS fix.	
	Solid Red	Standby mode	
	Flashing Green	When you press the reset button, flashing green indicates when to release the reset button to reboot the gateway.	
	Flashing Red	When you press the reset button, flashing red indicates when to release the reset button to reset the gateway to the factory default settings.	
	Flashing Amber	When you press the reset button for more than 20 seconds, flashing amber indicates when to release the reset button to enter Recovery mode. (See Recovery Mode on page 48.)	
Signal	**Solid Green**	Good signal (equivalent to 4–5 bars)	Off
	Solid Amber	Fair signal (equivalent to 2–3 bars)	Off
	Flashing Amber	Poor signal (equivalent to 1 bar) If possible, Sierra Wireless recommends moving the gateway to a location with a better signal.	
	Flashing Red	Inadequate (equivalent to 0 bars) Sierra Wireless recommends moving the gateway to a location with a better signal.	
Network	**Solid Green**	Connected to an LTE network	Off
	Solid Amber	Connected to a 3G or 2G network	Off
	Flashing Green	Connecting to the network	
	Flashing Red	No network available	
	Flashing Red/ Amber	Network Operator Switching is enabled, but the gateway is unable to locate the required firmware. For more information, refer to the ALEOS Software Configuration User Guide (Admin chapter).	
Activity	**Flashing Green**	Traffic is being transmitted or received over the WAN interface.	
	Flashing Red	Traffic is being transmitted or received over the serial port. This behavior only appears if the RV50 Series gateway is configured to display it. For more information, refer to the ALEOS Software Configuration Guide (Serial chapter).	
	Flashing Amber	Traffic is being transmitted or received over both the WAN interface and the serial port. This behavior only appears if the RV50 Series gateway is configured to display it. Refer to the ALEOS Software Configuration Guide (Serial chapter).	
ALL	**Green LED chase**	Radio module reconfiguration/firmware update or Network Operator Switching is in progress.	
	Amber LED chase	ALEOS software update is in progress.	

a. To configure LED Power Saving Mode, refer to the ALEOS Software Configuration User Guide (Services chapter).

V3 Wiring Diagram
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