

## Battery Regulator



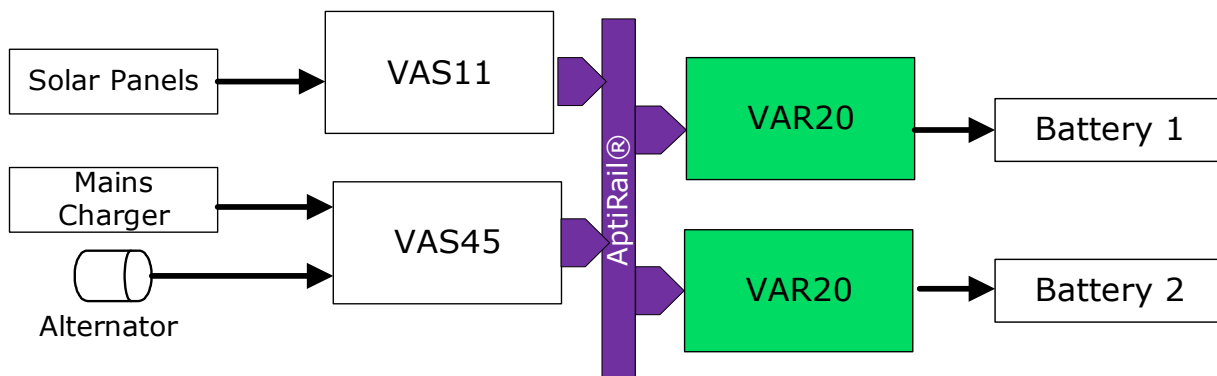
### FEATURES

- Part of the Autonnic® AptiVolt® range
- Connects directly to AptiRail®
- Delivers up to 20A of charging current
- 3 stage charge profile + recovery
- Manages a single 12V battery or bank
- 3 levels of charge Priority Setting
- 5 different Battery Chemistries
- AptiLoop® enabled for full monitoring
- Will deliver up to 300W
- Visual display of battery charge current
- LED status monitoring
- Very low standby battery drain
- Battery Temperature Monitoring
- Reverse protection

### APPLICATIONS

*Any Multi-Battery Multi-Source installation*

- Yachts and Barges
- Motor-homes
- Coaches
- Emergency Vehicles
- Military
- Communications Installations



### ABSOLUTE MAXIMUM RATINGS

PARAMETER	DESCRIPTION	NOTES	CONDITIONS	VALUE	UNIT
$\Theta_{STOR}$	Storage Temp Range			-20 to +100	°C
$\Theta_{AMB}$	Operating Temp Range			-20 to +50	°C
	Shock Resistance		Single impact	±10	G
	Vibration Resistance		60Hz, 10 Minutes	±5	G
$V_{CC}$	AptiRail Supply Voltage		At 25degC	25	Vdc

### ORDER INFORMATION

PART	DESCRIPTION	SHIPPING WEIGHT
VAR20	A series battery regulator	200g

## ELECTRICAL CHARACTERISTICS AT 20°C

PARAMETER	DESCRIPTION	NOTES	MIN	TYP	MAX	UNIT
V <sub>cc</sub>	Input Voltage	Priority levels 1,2 and 3	16.2	16.4	16.6	Vdc
Eff	Power conversion efficiency	At 15A			98	%
V <sub>bat</sub>	Battery charging range		10		16	V
I <sub>out</sub>	Battery Charge Current		2		20	A
I <sub>q</sub>	Battery drain when off			4		mA

### Command Set NOTE standard address as delivered is 1 or 2

This data available on AptiLoop at 1200b/s

#### Debug

\$APA,<address>,<data><CR>      \$APA,<address>,<data><CR>

#### Status

\$APE,<address>,<data><CR>      \$APE,<status>\*<checksum>

#### Fault code

\$APF,<address><CR>      \$APF,<address>,<faultstatus>,<faultcode>\*<checksum><CR>

#### Information

\$API,<address><CR>      \$API,<address>,<device type>,<serial number>,<firmware version>,<hardware revision>\*<checksum><CR>

#### Get data

\$APQ,<address><CR>  
    \$APQ,<address>,<status>,VAR20,<VINA>,<VOUT>,<IINA>,<IOUT>,<TBOX>  
    \*<checksum><CR>

#### Set address

\$APS,<current address>,<new address><CR>      \$APS,<new\_address>,<status>\*<checksum><CR>

### CONNECTIONS

- Top:
- 1 Ground
  - 2 Logic input. Join to pin 1 to turn OFF
  - 3 Status output. Will sink up to 100mA at12V
- Main
- 1 Battery +
  - 2 Battery -
  - 3 Temperature Probe +
  - 4 Temperature Probe -

### DIMENSIONS

138H x 74W x 80D  
 IP30  
 DIN RAIL (top hat) mounted