



AGM Battery Charging		
STAGE	END CONDITIONS	ERROR
<p><b>Bulk Stage I<sub>1</sub></b></p> <p>Maintain Current <math>\leq 30</math> A per 100 Ah C<sub>20</sub></p> <p>Typically, Constant Current, but Constant Power, or Taper Charge Permitted</p>	<p>End when voltage = 2.40 to 2.43 V/cell (20°C)</p> <p>Max time (h) = 1.2 * DoD (Ah) / Avg. Current (A)</p>	<p>If Max time is exceeded: STOP</p>
<p><b>Absorption Stage V<sub>1</sub></b></p> <p>Maintain Constant Terminal Voltage (Adjusting only for changing battery temperature)</p> <p>Voltage = 2.40 to 2.43 V/cell (20°C)</p>	<p>Without the optional accelerated finishing stage, maintain charge until current acceptance drops by less than 0.10 ampere over a 1 hour period Max Time: 12h</p> <p>With optional accelerated finishing stage end when current = I<sub>2</sub> Max Time: 6h</p>	<p>If Max time is exceeded: Goto next stage</p> <p>If Current exceeds 8 A after dropping below 6 A: STOP</p>
<p><b>Optional Accelerated Finishing Stage I<sub>2</sub></b></p> <p>Maintain Constant Current: 1 to 2 A per 100 Ah C<sub>20</sub></p>	<p>Charge for 1 to 4 hours based on Ah accumulated in first two stages:</p> <p>&lt;25% of C<sub>20</sub> – 1 hour 25% to 50% of C<sub>20</sub> – 2 hours &gt;50% of C<sub>20</sub> – 4 hours</p>	<p>If Voltage exceeds 2.80 V/cell: Goto next stage</p>
<p><b>Optional Float Stage V<sub>2</sub></b></p> <p>Maintain Constant Terminal Voltage (Adjusting only for changing battery temperature)</p> <p>Voltage = 2.25 V / cell (20°C)</p>	<p>No time limit</p> <p>This step is generally unneeded if (1) zero load is present when device is not in operation, and (2) device duty cycle does not include periods of non-use exceeding 3 months.</p>	

To compensate for battery temperature not at 20°C, subtract 0.005 V/cell for each 1°C above 20°C; add 0.005 V/cell for each 1°C under 20°C.

Applies to East Penn's 8A Line product.