



# TECHNICAL BULLETIN

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Rev. 1

## Photovoltaic Battery Charging Parameters

**Gel**

**AGM**

**Flooded**

### Bulk Charge Stage

Max. Current (Monoblock Battery Design)	30% of 20hr Rate	30% of 20hr Rate	30% of 20hr Rate
Max. Current (Single Cell Battery Design)	20% of 6hr Rate	20% of 6hr Rate	20% of 6hr Rate

### Absorption (Regulation) Stage

Constant Voltage	2.35 - 2.40 vpc	2.30 - 2.35 vpc	2.40 - 2.45 vpc
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### Float Charge

Constant Voltage	2.25 - 2.30 vpc	2.25 - 2.30 vpc	2.30 - 2.35 vpc
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### Equalize Charge

Constant Voltage	2.40 - 2.45 vpc	2.35 - 2.40 vpc	2.50 - 2.55 vpc
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Voltage limits at 25°C (77°F)

Temperature Coefficient = 5 mv / °C

Cut-off parameters per charge and equalize intervals are application specific and will vary dependent upon site specific characteristics such as: temperature, days of autonomy, array to load ratio. etc...

Gel Types	AGM Types	Flooded Types
8GU1, 8G22NF, 8G24, 8G27, 8G30H, 8GGC2, 8G4D, 8G8D, G45, G75 & G105	8AU1, 8A22NF, 8A24, 8A27, 8A31, 8AGC2, 8A4D, 8A8D & Unigy II	8L16, 8GC220, DC27, 8C11, 9C11, GC15G, M75, M85 & M100