☐ Grid Tied

□ Off Grid

□ Hybrid

□ Backup

# Commissioning Log Date:

Customer Name			
Customer Address			
Phone Number		Email	
Distributor/Dealer		Date of Purchase	
Company Address			
Phone Number		Email	
Battery Model		Installation Date	
Number of Batteries in Series	Number of Strings in Parallel	System Voltage	

Number of Batteries in Series	Number of Strings in Parallel	Syst	stem Voltage	
		Syst	rstem Capacity (AH @20HR)	
Battery Date Code(s)		Low (LVE	w Voltage Disconnect /D)	
			ny additions/adjustments nce battery install date	

CHARGE SOURCE(S):	Volts (V)	Watts (W)	Qty
RENEWABLE			
PV Panels			
Wind			
Other			
AC			
Generator			
Grid			
Other			

INVERTER/CHARGER INFORMATION:					
CHARGER(S)					
Make					
Model					
Output	Volts DC	Amps DC			
INVERTER(S)					
Make					
Model					
Input	Volts DC	Amps DC			

		CHARGE CONTROLLER SETTINGS	INVERTER/CHA	RGER SETTINGS	
	Volts (V)	Amps (A)	Time (HH:MM)	Volts (V)	Time (HH:MM)
Bulk					
Absorption					
Float					
Equalization					

### **TOTAL AVERAGE DAILY POWER CONSUMPTION:**

KWH(AC)		KWH(DC)	
Number of Days Between Full Charge Cycle			

Details to your system information and user profile is mandatory to properly troubleshoot and ensure appropriate system set up. For assistance in completing non-battery related sections, please contact your system install/service technician and/or equipment manufacturer.



Service Engineer (Company/Name): Signature:	Customer (Name): Signature:	

# **Commissioning Log**

### HAS A COMMISSIONING CHARGE BEEN PERFORMED? □Y □N AMBIENT TEMPERATURE (°C or °F):

# **Commissioning Date:**

All readings should be taken with the battery stabilized on float charge. All specific gravity readings must be temperature corrected. Do not add water before readings are taken. For charging parameters, please refer to our product user guide. Readings taken from Pos(+) to Neg(-) end of battery string.

Cell#	Specific Gravity	Voltage									
1			25			49			73		
2			26			50			74		
3			27			51			75		
4			28			52			76		
5			29			53			77		
6			30			54			78		
7			31			55			79		
8			32			56			80		
9			33			57			81		
10			34			58			82		
11			35			59			83		
12			36			60			84		
13			37			61			85		
14			38			62			86		
15			39			63			87		
16			40			64			88		
17			41			65			89		
18			42			66			90		
19			43			67			91		
20			44			68			92		
21			45			69			93		
22			46			70			94		
23			47			71			95		
24			48			72			96		

# STATE OF CHARGE AS A MEASURE OF SPECIFIC GRAVITY

AND OF LIE OFFICE POLITY.						
Charge %	Specific Gravity	Cell Voltage				
100%	1.255-1.260	2.10				
75%	1.220-1.225	2.08				
50%	1.200-1.205	2.05				
25%	1.175-1.180	2.02				
0%	1.145-1.150	1.98				

#### COMMISSIONING CHARGE

A refresh charge (or "boost charge") is recommended before putting batteries into service. The recommended refresh charge parameters

- Charge current of 10-15A per 100 Ah  $C_{10}$  until 2.40 V/cell is
- reached (3-5 Hrs)
  Charge at 5A per 100 Ah C<sub>10</sub> V/cell for 14 hours (voltage exceeds 2.40 V/cell)
- Charge with 5A per 100 Ah  $C_{10}$  for 4 hours

## INSPECTION CHECKLIST:

Terminal/Cable Connections	
Voltage/Specific Gravity	
Electrolyte (Between Min/Max Markers)	
Battery Container (No Shipping Damage/Leakage)	
Vent Cap/Float Vents (Good Condition, No Damage)	

Repeat steps 3 and 4 (max 5 times) until the following criteria is met,

- All cells/blocks exceed 2.60 V/cell
- Electrolyte density of each cell does not deviate more than ±0.015 kg/l from the average value

Do not allow temperatures to exceed 55°C (131°F), continue operation when below 45°C (113°F).

. Top up with demineralized water to upper electrolyte level mark Electrolyte density must not differ more than 0.015 kg/l between

Additional	Notes/Observations: