

### Deep Cycle AGM Range

# EXCELLENT CYCLING ABILITY FOR SOLAR / PHOTOVO



# **DP-12280**

SEALED VRLA MONOBLOC AGM BATTERIES VALVE REGULATED LEAD ACID BATTERY FOR CYCLING APPLICATIONS

12V 280AH @ 20 HR RATE to 1.75VPC 12V 317AH @ 100 HR RATE to 1.75VPC



SOLAR / PHOTOVOLTAIC WIND GENERATION INVERTER / MOBILITY TELECOMMUNICATION APPLICATIONS

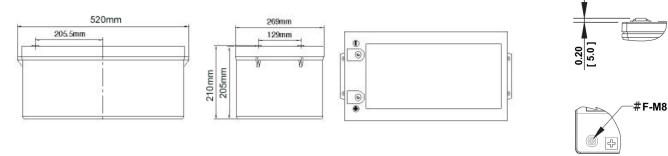
#### **Innovative Features**

- Thick positive plate design and high Tin alloy~12 years design life @ 20°C(68°F).
- UL Recognized component.
- E Valve regulated lead acid battery (VRLA).
- High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- Operates at a low internal pressure.
- Heavy duty insert copper terminals for ease of assembly, reduced maintenance and increased safety.
- Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- Standard: Reinforced ABS (UL 94HB) container and cover. Optional: Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.
- Cver-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- Multicell design for ease of installation and maintenance.
- Horizontal or vertical operation.

	12 VOLTS - 280 AMPERE HOUR @ 20 HOUR RATE													
	AH Capacity to 1.75VPC @ 20°C (68°F)													
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr			
1.75	1.75 180 192 204 215 220 242 252 258 280 283 317													

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#### Length: 520mm Width: 269mm Height: 210mm

	Electrical Specifications										
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current	Short Circuit Current	Ohms Imped 60 Hz( $\Omega$ )					
6	12.84	153lbs 69.5kg	SG = 1.300	1778 Amps	6100 Amps	0.0015					

Capacity	280 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F). 317 Ah @ 100 hr. rate to 1.75 volts per cell @ 20°C (68°F).
Applicable Operating Temperature Range	-40°C (-40°F) to +70°C (158°F).
Ideal Operating Temperature Range	+20°C (+68°F) to +30°C (+86°F ).
Floating Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F).
Recommended Maximum Charging Current Limit	0.25C20 amperes (70.0 amperes @ 100% depth of discharge) @ 20 hr. rate to 1.75VPC.
Equalization and Cycle Service Charging Voltage	14.1 to 14.4 VDC/unit Average at 25°C (77°F).
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 14.0 amperes RMS (C/20) to 1.75VPC.
Self Discharge	EverExceed Deep Cycle AGM Range batteries may be stored for up to 12 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Accessories	Inter unit connectors racks and cabinet systems are available.
Terminal: Inserted	Threaded copper alloy insert terminal.
Terminal Hardware Initial Torque: Inserted Terminal	11 N-m

	Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F)												
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr		
1.85	211	173	123	96.8	80.7	55.7	46.4	40.6	26.3	21.8	5.77		
1.80	224	179	128	101	84.4	57.9	48.3	41.2	26.7	23.0	6.17		
1.75	233	186	131	104	86.5	59.3	49.2	42.0	27.8	23.3	6.34		

	Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F)											
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr	
1.85	111	87.8	62.4	49.0	40.8	28.3	23.3	19.9	13.0	10.7	2.89	
1.80	117	93.7	66.0	52.0	43.3	29.3	24.4	20.7	13.5	11.5	3.08	
1.75	120	96.1	68.0	53.7	44.1	30.2	25.2	21.5	14.0	11.8	3.17	

Note: Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.