

# Narada

stored energy solutions for a demanding world

The Narada Telecom Pure Lead range of VRLA batteries are well suited to provide battery backup in outdoor application long duration or outside plant application.

All Narada Telecom series batteries use CCPP plate technology and a patented post design offering exceptional service life.



#### Technical Features:

- Flame Retardant ABS Cover and Container, UL94 V-0, LOI>28%
- Patented copper alloy terminal design
- Epoxy TPS design for high reliability post seal
- Continuous Cast Punch Pure Lead Plate (CCPP) Technology
- Shelf Life 2 years (20°C/68°F)
- Initial capacity at 100%
- Low pressure one-way flame arresting valve(s) UL1989
- Absorbent Glass Mat (AGM) Sealed Technology, Recombination efficiency of 99.9%

#### Compliance and Safety:

- **ISO 9001:2000 and ISO 14001:2004 certified production facilities**
- UL Recognized Component 924, for use in or with listed UL1778, UL1989 and UL924 systems
- IEC60896-21/22 / BS6290 part 4
- Certified to NEBS Version 8, Level 3
- Telcordia GR-1089-CORE, Issue 6
- Telcordia GR-63-CORE, Issue 4
- **Manufactured under system ISO9001(TUV)**
- Battery installation compliant with: EN 50272-2 or local equivalents
- NEBS Earthquake Risk Seismic Zone 4 Compliant
- Exceeds 1997 UBC Zone 4 Seismic requirements for at or below grade installations
- Exceeds 2007 IBC requirements for 125% g level

#### Transportation:

- Classified as Nonspillable UN 2800 and meet the Nonspillable criteria listed in DOT-CFR Title 49, 171-189 (d) (3) (i) and (ii) and exempt from CFR 49, Subchapter C requirements
- Meets transportation conditions of IMDG exemption 238, IATA/ICAO Special Provision A67 (Not Restricted)

#### Constant Current Discharge, 1.75vpc, 77°F/25°C

Model	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h
12NPL100T	269	156	93.4	71.7	58.8	35.5	25.9	20.6	17.10	14.70	11.50	9.46	7.93	5.00
12NPL100	308	179	114.6	85.3	68.5	39.2	27.8	21.7	17.89	15.28	11.96	10.15	8.66	5.61
12NPL150	342	217	144.7	110.6	90.7	54.8	40.0	32.7	27.34	23.42	18.49	15.18	13.07	8.63
12NPL170	372	236	159.8	132.7	108.5	65.2	47.7	37.8	31.36	26.93	21.11	17.49	14.97	9.35
12NPL190	425	273	191.0	149.7	124.6	74.4	53.5	42.0	34.67	29.55	22.91	20.00	16.58	9.55
12NPL200	488	315	212	163	133	78.5	56.4	44.3	36.6	31.30	25.20	21.70	18.5	12.9

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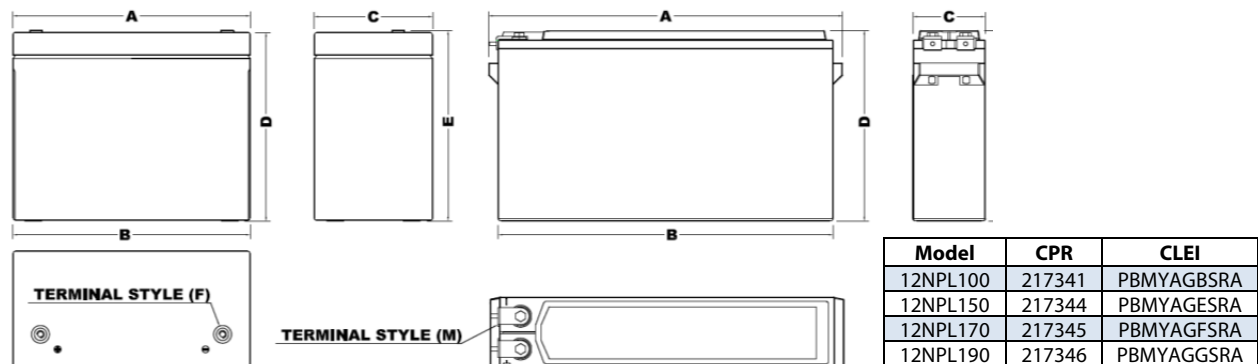
## Operating Parameters

Float Charging Voltage	2.25Vpc to 2.27Vpc @ 77°F (25°C)
Equalize Charging Voltage	2.35Vpc to 2.40Vpc @ 77°F (25°C)
See Operations and Maintenance Manual for specific guidelines and recharge times	
Charging Temperature Compensation	-1.7 mV/cell/°F > 77°F (-3 mV/cell/°C > 25°C)
	+1.7 mV/cell/°F < 77°F (+3 mV/cell/°C < 25°C)
Maximum AC Ripple (Charger)	0.5% RMS, 1.5% peak-to-peak for float charge voltage
Maximum Charge Current	C <sub>5</sub> Rate Amps (5 hour rate @ 1.75vpc)
Electrolyte	Absorbed 1.300 s.g. H <sub>2</sub> SO <sub>4</sub>
Self-discharge Rate	<2% per month at 77°F (25°C)
Relief Valve	Self-resealing; Operates at 2 to 3 psi and is complete with integral flame arrestor
Terminal Type	Torque
M6-M / M6-F	78 in-lbs (8 Nm)
M8-F	90 in-lbs (10 Nm)
Operating Temperature Range	
Nominal	+74°F (24°C) to 80°F (27°C)
Charge	-20°F (-28°C) to +122°F (50°C)
Discharge	-40°F (-40°C) to +140°F (60°C)
Storage Temperature Range	-4°F (-20°C) to +104°F (40°C)

See Operations Manual for full specification and operating parameters.

## Dimensions & Specifications

Model	V	Ah 8hr 1.75 vpc 77°F	Ah10hr 1.80 vpc 25°C	Total Length (A)		Base Length (B)		Width (C)		Height (D)		Height Term. (E)		Weight	
				mm	in	mm	in	mm	in	mm	in	mm	in	Kg	Lbs.
12NPL100T	12	92	93	330	13.0	330	13.0	174	6.8	214.5	8.45	218	8.57	29	64
12NPL100	12	96	100	395	15.5	368	14.4	108	4.2	287	11.30	274	10.79	31.2	69
12NPL150	12	148	151	550	21.6	528	20.7	125	4.9	283	11.15	272	10.71	48.2	107
12NPL170	12	169	171	550	21.6	528	20.7	125	4.9	283	11.15	272	10.71	51.8	114
12NPL190	12	191	199	554	21.9	530	20.8	125	4.9	316	12.45	305	12.01	59.3	131
12NPL200	12	201	210	554	21.9	530	20.8	125	4.9	316	12.45	305	12.01	60	132



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NPL-Series