

# Narada

stored energy solutions for a demanding world

## 12NPL170

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
- ◆ 24 months of storage at 68°F (20°C)
- ◆ 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 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

### 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)

Ah @ 8hr 1.75 vpc / 77°F (25°C)	169 Ah
Ah @ 10hr 1.80 vpc / 77°F (25°C)	171 Ah

Nominal Voltage	12V
Float Charge Voltage @25°C (2.23 – 2.27vpc)	13.4 – 13.6
Max. Charge Current (A) (5 hour rate @ 1.75vpc)	43 Amps

Electrolyte Absorbed H <sub>2</sub> SO <sub>4</sub>	1.300
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Short Circuit Current (A)	2758 Amps
Internal Resistance (mΩ)	4.6

Terminal Type	Torque
M6-M (Front L Bracket)	78 in-lbs (8 ±1 Nm)
M6-F (Top Insert)	78 in-lbs (8 ±1 Nm)

Dimension	in	mm
Length	21.66	550
Length Base	20.79	528
Width	4.93	125
Overall Height	11.15	283

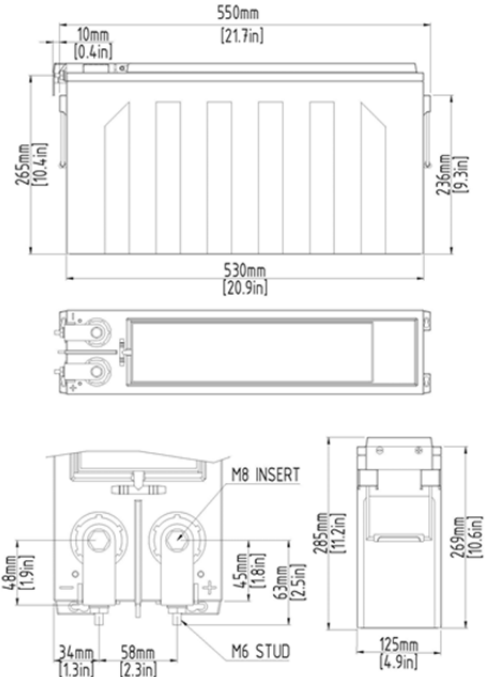
	Lbs.	Kg
Weight	114	51.8

CLEI	PBMYAGFSRA	CPR	217345
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NPL-Series

## Operating Parameters

Float Charging Voltage	13.5V / 2.25vpc @ 77°F (25°C)
Equalize /Cycle	14.0V – 14.3V 2.33Vpc to 2.38Vpc @ 77°F (25°C)
See Operations and Maintenance Manual for specific guidelines and recharge times	
Charging Temperature Compensation	-2 mV/cell/°F > 77°F (-3.6 mV/cell /°C > 25°C)
	+2 mV/cell/°F < 77°F (+3.6 mV/cell/°C < 25°C)
Maximum AC Ripple (Charger)	0.5% RMS, 1.5% peak-to-peak for float charge voltage for best results
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)



Constant Current Discharge (Amps) @ 77°F/25°C															
End vpc	5m	15m	30m	45m	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.67	424	245	162	135	112	66.4	48.4	38.4	32.0	27.4	21.4	17.7	15.2	9.41	7.96
1.70	404	242	161	134	111	66.0	48.1	38.1	31.8	27.2	21.3	17.6	15.1	9.36	7.93
1.75	372	236	160	133	109	65.2	47.7	37.8	31.4	26.9	21.1	17.5	15.0	9.35	7.87
1.80	335	217	151	129	107	65.1	47.4	37.6	31.3	26.8	20.9	17.1	14.6	9.19	7.68
1.83	312	214	147	125	103	63.2	46.6	37.0	30.8	26.3	20.7	16.9	14.4	8.88	7.43
1.85	287	198	140	121	102	62.8	46.0	36.7	30.6	26.2	20.3	16.5	13.8	8.19	6.73
1.86	275	190	136	119	101	62.6	45.7	36.5	30.5	26.1	20.1	16.3	13.5	7.84	6.39

Constant Power Discharge (Watt/Cell) @ 77°F/25°C															
End vpc	5m	15m	30m	45m	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.67	739	473	321	267	221	134	96.5	76.4	63.5	54.5	42.6	35.2	30.0	19.3	16.4
1.70	719	468	320	266	220	133	96.4	76.3	63.4	54.4	42.5	35.1	29.9	19.2	16.3
1.75	682	456	315	264	217	132	95.9	76.0	63.1	54.2	42.2	34.9	29.8	19.0	16.2
1.80	605	416	295	254	213	131	95.1	75.3	62.6	53.8	41.8	33.8	28.2	17.2	14.4
1.83	559	407	289	248	207	130	94.6	74.9	62.1	53.1	41.1	33.6	28.1	16.6	13.6
1.85	549	388	280	243	204	129	94.3	74.8	61.9	52.7	40.3	32.5	27.0	15.7	12.8
1.86	544	378	276	241	203	128	94.1	74.7	61.8	52.5	39.9	31.9	26.5	15.2	12.4

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