

# 050PV0250

## (2V 280Ah @ 10hr)

Eternity Technologies valve regulated lead-acid batteries for the standby power market. With an innovative Gel-technology design Eternity Technologies OPzV batteries have a reliable maintenance-free and leakage-free construction.

### Performance characteristics

Nominal Voltage 2V  
 Number of cells 1  
 Design Life 20 years

#### Nominal Capacity 20°C (68°F)

10 hour rate (28A, 1.8V) 280Ah  
 5 hour rate (51A, 1.75V) 255Ah  
 1 hour rate (155A, 1.6V) 155Ah

#### Internal Resistance

Fully Charged Battery 20°C (68°F) 0.78mOhm

#### Self-Discharge

2% of capacity declined per month at 20°C (average)

#### Operating Temperature Range

-20°C to +55°C

#### Maximum Discharge Current 20°C (68°F)

434A

#### Charge Methods: Constant Voltage Charge 20°C (68°F)

Cycle use 2.40V (time limited)  
 Maximum charging current 140A  
 Standby use 2.25V ± 1%  
 Temperature compensation -5.0mV/°C/Cell  
 Terminal torque 23Nm

#### Discharge Constant Current (Amperes at 20°C)

Cells (V)	10 m	15 m	30 m	1 h	2 h	3 h	5 h	8 h	10 h
1.60	434.0	377.5	279.5	154.9	103.8	77.0	50.8	34.3	28.8
1.65	392.5	348.4	267.1	154.9	103.8	77.0	50.8	34.3	28.8
1.70	356.2	324.5	253.2	148.8	102.4	77.0	50.8	34.3	28.8
1.75	320.1	299.9	223.5	143.6	100.4	75.8	50.8	34.6	28.8
1.80	288.7	257.6	195.4	124.3	92.7	72.2	48.7	33.0	28.0
1.83	259.6	226.0	183.9	118.3	88.6	67.3	47.4	32.4	27.7
1.85	241.3	212.6	170.3	113.9	84.9	64.7	45.0	30.9	26.6
1.87	216.1	194.9	154.9	104.7	80.9	62.0	43.5	30.5	25.6
1.90	180.4	157.9	134.1	95.6	74.7	57.3	39.0	26.8	22.9

#### Discharge Constant Power (Watts at 20°C)

Cells (V)	10 m	15 m	30 m	1 h	2 h	3 h	5 h	8 h	10 h
1.60	710.7	618.1	475.5	276.4	192.3	144.2	96.2	64.7	54.7
1.65	657.6	583.7	457.2	276.2	192.3	144.2	96.2	64.7	54.7
1.70	610.4	556.1	441.0	267.1	189.4	144.2	96.2	64.7	54.7
1.75	562.9	527.4	397.6	259.8	186.3	141.7	96.4	65.2	54.7
1.80	520.6	464.6	355.1	228.8	172.6	135.8	92.4	62.6	53.1
1.83	476.9	415.3	339.3	220.7	166.7	127.6	90.1	61.7	53.1
1.85	446.2	393.0	317.3	213.5	160.3	122.8	85.9	58.8	50.7
1.87	403.7	364.0	291.9	197.3	154.0	118.2	83.4	58.8	48.9
1.90	344.4	301.6	255.3	182.5	143.7	111.1	76.0	51.8	44.6



**N** Part of our Network Power range

### Features

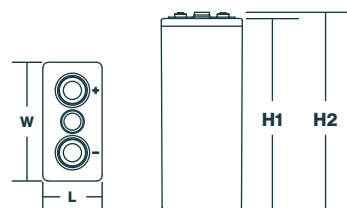
- High capacity density
- Robust tubular positive electrode design, compliant with DIN 40742
- Low self discharge rate allows for up to 2 years shelf life
- Operating temperature -20°C to +55°C
- 20 year float life at 20°C (68°F)
- EUROBAT design life: Long Life > 12 years
- Fully recyclable with low CO<sub>2</sub> footprint

### Applications

- Telecommunications/ Mobile Phone Stations
- Traffic Systems
- UPS Systems
- Emergency Lighting
- Electrical Switching

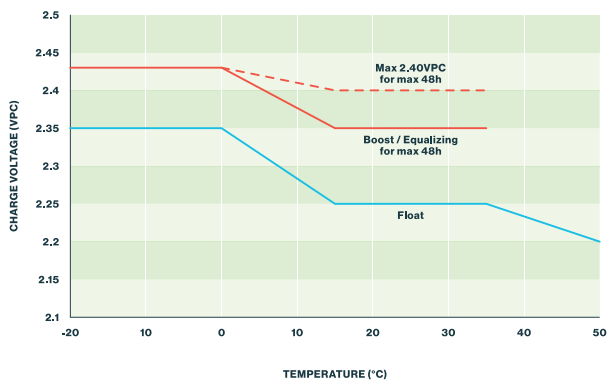
### Dimensions and weight

Length 126 mm  
 Width 208 mm  
 Height (H1) 367 mm  
 Total height (H2) 392 mm  
 Approx. weight 22.2 kg

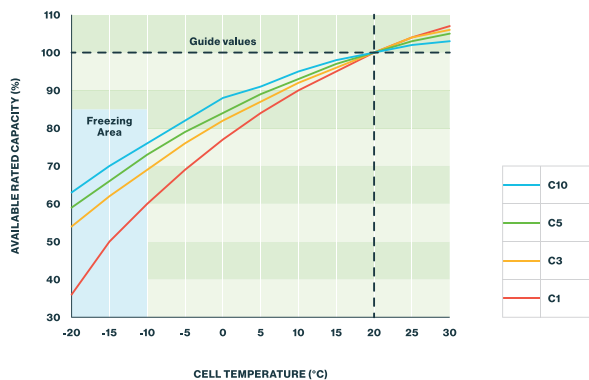


Compliant with IEC60896-21/22

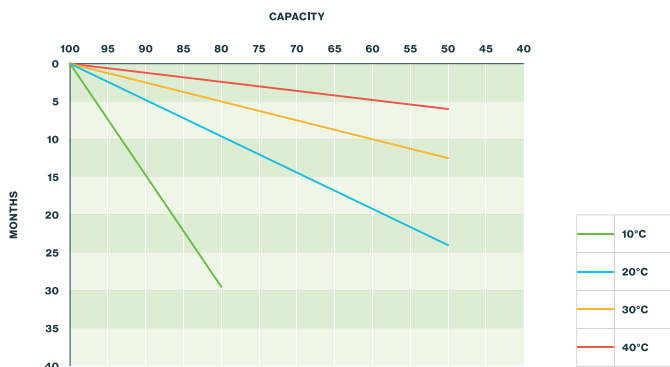
### Charging voltage vs. Temperature



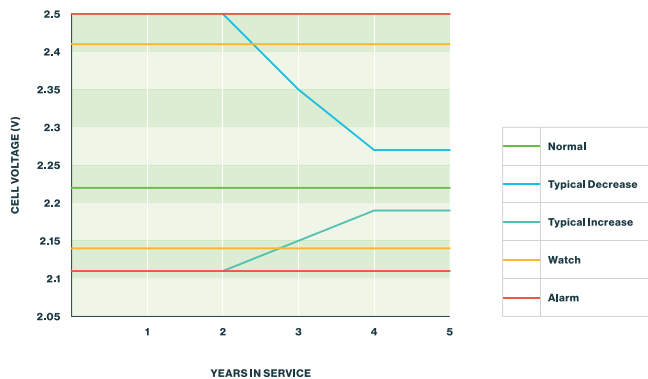
### Capacity vs. Temperature



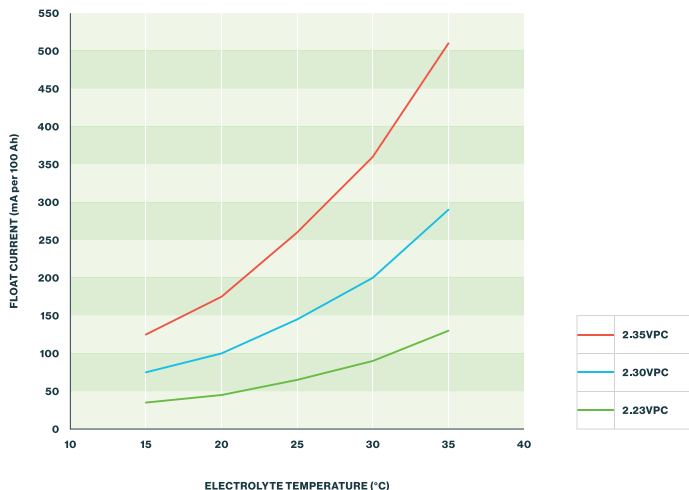
### Self discharge at different temperatures



### Float voltage deviation vs. Years in service



### Float current: Residual charge current



### Storage: Determine the state of charge

