

Portable Traffic Signal Unit (PTSU) Battery Pack

20Ah Rechargeable Lithium Iron Phosphate Smart Battery.

Part Number: T PTL1-BP-02

Battery

Nominal Voltage	12.8V
Nominal Capacity	@5hr Rate 20Ah
Watt-hour	256.0Wh
Internal Resistance.....	(at 1KHz) $\leq 40m\Omega$
Charge.....	@25°C
Standard Charge Current	4A
Maximum Charge Current	10A
Cut-off Voltage.....	14.4V (14.6V max.)
Discharge	@25°C
Standard Discharge Current	4A
Max. Continuous Discharge.....	15A
Cut-off Voltage.....	10.0V (9.6V min.)

Operating Temperature

Charge.....	0 - +50°C
Discharge	-10 - +60°C
Storage.....	-10 - +40°C
Humidity	RH \leq 85%
Battery Case Material.....	ABS+PC
Termination	Binder 5 pin Connector
Cycles.....	2000

Protection

Overcharge protection, over discharge protection, over temperature protection, over current protection, balancing function

Built in protection

PTL Rechargeable Lithium batteries adhere to strict safety guidelines by incorporating Battery Management Systems (BMS) that include protection components.

Fuse

Thermistor

Protection Circuit Module (PCM)

Charger

Only use Lithium Ion Phosphate battery charger

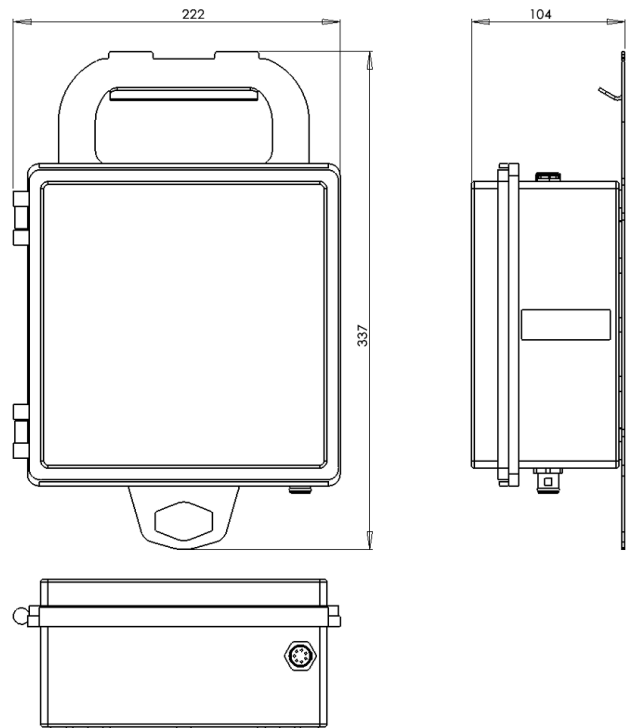
Part number.....	T PTL1-BC-02
Input Voltage.....	240VAC
Output Voltage	12VDC/5A
Link to charging video.....	www.youtube.com/watch

Enclosure

Enclosure Material	Polycarbonate
Weight.....	3.5kg

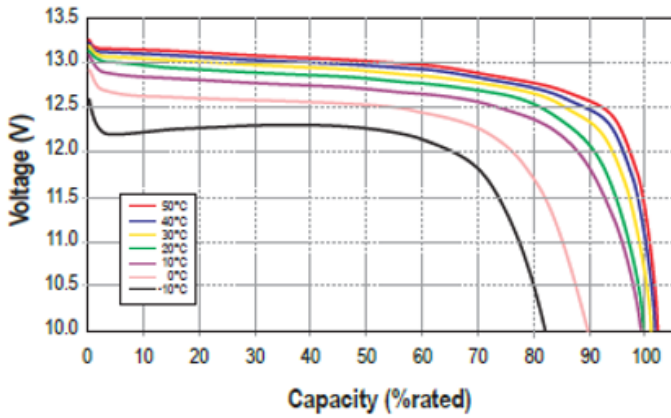
Dimensions

Length	337mm
Width	222mm
Height.....	104mm



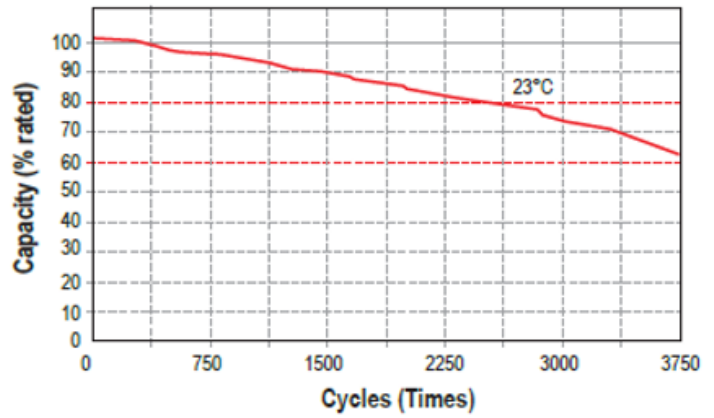
PTSU Battery Pack Specifications: 12.8V 20Ah.

Discharge Voltage Profiles @ 0.5C Discharge Rate
Various Ambient Temperatures

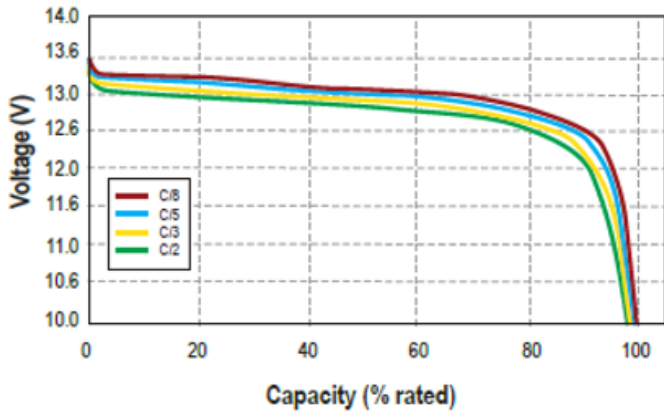


Discharge Capacity Performance

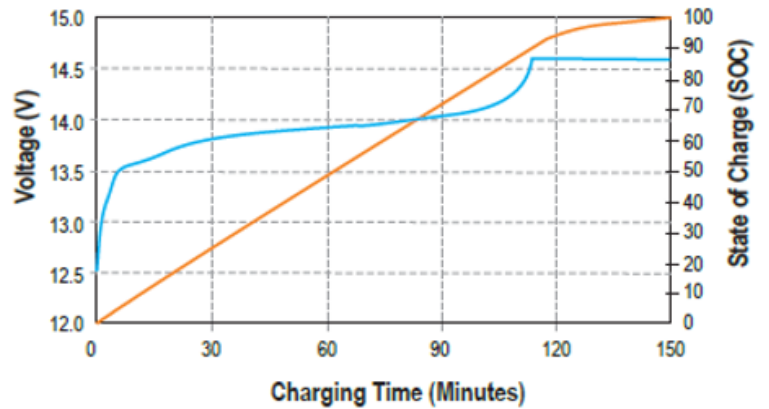
Charged: 0.5C to 14.6V, CV@14.6 to 1A
Discharged: 0.5C to 10.5V



Discharge Voltage Profiles @ Various Temperatures
23°C Ambient Temperatures



Typical Voltage Profiles & SOC Profiles @ 0.5C Charging
23°C Ambient Temperatures



Transport Information for Lithium Battery



Battery Type	Lithium Iron Phosphate
Dangerous Goods Class	9
Hazchem	4W
UN38.3	Compliant
UN Number	3480
Air freight	Forbidden

Link to MSDS & shipping requirements

[PTL Battery Pack](#)
[PTL UN38.3 Report](#)