

High Temperature Battery

Front Terminal Battery PT12HT

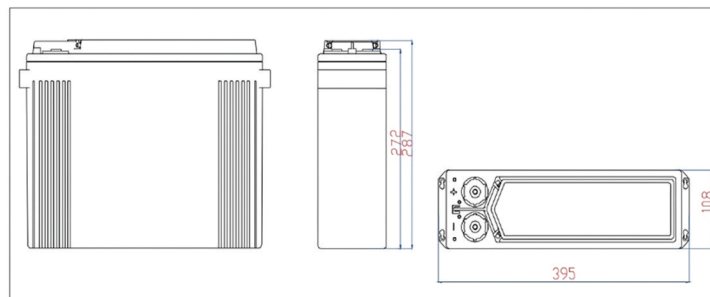


High Temperature Batteries

Platin Iran's PT12HT series battery special designed for high temperature floating application, ideal for telecom service where the temperature is higher. With CCPP thin plate technique, innovative structure design, high quality manufacturing and high quality high-temperature-resistant material, PT12HT batteries have 10 years design life at 35°C. PT12HT series also meet the standard <YD/T2657-2013 High temperature valve-regulated lead acid batteries for telecommunications>.

PT12HT100:

Dimensions-mm



Specifications

Battery Model	PT12HT100
Nominal Voltage	12V
Rated Capacity	100Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	Approx 30.0 kg
Internal Resistance	Approx 6.06mΩ
Temperature Ranges	Operation (maximum): -40°C to 65°C(-40°F to 149°F)
	Operation (recommended): 15°C to 35°C(59°F to 95°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	25 A
Equalize and Cycle Service	2.35V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 96% after 28 days storage(35°C/95°F)
Terminal	M6 Female
Terminal Hardware Torque	8~10N·m
Container Material	High temperature ABS

Constant Current Discharge Characteristics Units: Amperes (35°C, 95°F)

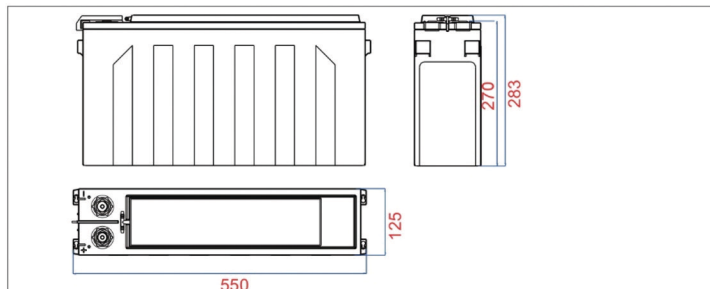
End voltage per cell	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	66.0	41.4	29.5	23.0	19.0	12.6	10.7	9.16	5.88
1.70V	65.5	41.1	29.1	22.8	18.9	12.5	10.6	9.10	5.87
1.75V	64.4	40.4	29.0	22.4	18.7	12.4	10.5	9.05	5.84
1.80V	62.2	39.1	28.4	22.2	18.3	12.1	10.4	8.95	5.79
1.83V	60.0	38.1	27.6	21.7	17.9	11.8	10.2	8.82	5.72
1.85V	58.0	37.0	27.0	21.2	17.5	11.7	10.0	8.70	5.64

Discharge Data with Constant Power Units: Watts per cell (35°C, 95°F)

End voltage per cell	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	130.2	82.7	58.5	45.8	37.8	25.1	21.3	18.1	11.6
1.70V	129.2	82.4	58.3	45.6	37.6	25.0	21.2	18.0	11.4
1.75V	128.1	81.7	57.7	45.3	37.3	24.8	21.0	17.9	11.2
1.80V	123.9	79.9	56.7	44.5	36.7	24.4	20.6	17.5	11.1
1.83V	119.7	78.0	55.7	43.7	36.2	23.9	20.5	17.3	10.9
1.85V	116.6	76.1	54.6	42.9	35.5	23.5	20.1	17.0	10.7

PT12HT150:

Dimensions-mm



Specifications

Battery Model	PT12HT150
Nominal Voltage	12V
Rated Capacity	150Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	Approx 47.0 kg
Internal Resistance	Approx 5.12mΩ
Temperature Ranges	Operation (maximum): -40°C to 65°C(-40°F to 149°F)
	Operation (recommended): 15°C to 35°C(59°F to 95°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	37.5 A
Equalize and Cycle Service	2.35V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 96% after 28 days storage(35°C/95°F)
Terminal	M6 Female
Terminal Hardware Torque	8~10N·m
Container Material	High temperature ABS

Constant Current Discharge Characteristics Units: Amperes (35°C, 95°F)

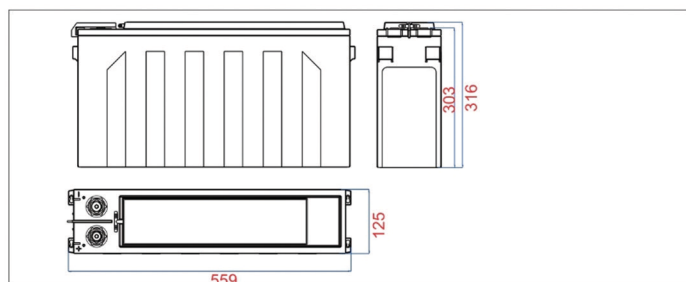
End voltage per cell	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	95.8	57.4	42.0	34.5	28.9	19.6	16.3	13.8	9.21
1.70V	95.7	57.3	41.9	34.3	28.8	19.4	16.1	13.5	9.14
1.75V	94.7	57.2	41.8	34.2	28.6	19.3	15.9	13.4	9.02
1.80V	92.2	56.5	41.7	33.9	28.4	19.1	15.8	13.3	8.11
1.83V	90.1	56.4	41.2	33.6	28.2	19.0	15.5	13.1	8.00
1.85V	87.4	55.0	40.8	33.2	28.1	18.8	15.3	12.9	7.86

Discharge Data with Constant Power Units: Watts per cell (35°C, 95°F)

End voltage per cell	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	191.1	118.7	86.2	70.8	58.9	39.5	32.4	27.5	17.2
1.70V	190.1	117.6	85.6	70.4	58.5	39.3	32.3	27.4	17.0
1.75V	189.0	116.6	85.3	70.2	58.3	39.0	32.1	27.3	16.9
1.80V	183.8	115.5	84.6	70.1	57.9	38.9	31.6	26.6	16.2
1.83V	180.6	114.5	84.2	69.4	57.3	38.3	31.0	26.1	16.0
1.85V	175.4	110.3	81.7	67.3	56.2	37.7	30.9	25.9	15.1

PT12HT200:

Dimensions-mm



Specifications

Battery Model	PT12HT200
Nominal Voltage	12V
Rated Capacity	200Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	Approx 58 kg
Internal Resistance	Approx 4.20mΩ
Temperature Ranges	Operation (maximum): -40°C to 65°C(-40°F to 149°F) Operation (recommended): 15°C to 35°C(59°F to 95°F) Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	50.0 A
Equalize and Cycle Service	2.35V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 96% after 28 days storage(35°C/95°F)
Terminal	M6 Female
Terminal Hardware Torque	8~10N·m
Container Material	High temperature ABS

Constant Current Discharge Characteristics Units: Amperes (35°C, 95°F)

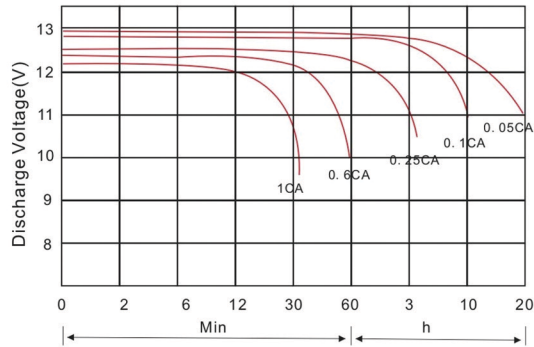
End voltage per cell	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	139	81.3	58.8	46.2	38.2	25.3	22.4	19.13	12.16
1.70V	137	80.9	58.5	45.9	37.9	25.1	22.2	18.85	11.99
1.75V	133	79.5	57.6	45.3	37.4	24.7	21.6	17.96	11.45
1.80V	126	76.4	56.1	43.9	36.3	23.4	21.0	17.67	10.89
1.83V	119	74.6	54.5	42.7	35.3	22.4	20.4	16.95	10.55
1.85V	113	71.4	53.0	41.7	34.2	21.8	20.1	16.43	10.27

Discharge Data with Constant Power Units: Watts per cell (35°C, 95°F)

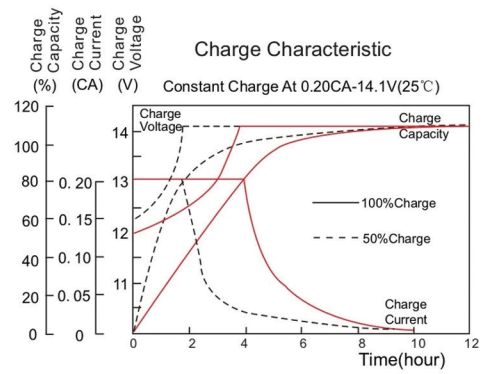
End voltage	1HR	2HR	3HR	4HR	5HR	8HR	10HR	12HR	20HR
1.67V	270	161.4	117.4	92.6	77.5	51.2	45.2	38.54	24.47
1.70V	267	161.1	116.8	91.8	76.9	50.8	44.7	38.01	23.84
1.75V	258	158.9	115.3	90.6	75.8	50.0	44.0	36.86	22.16
1.80V	245	153.4	112.5	88.5	73.9	47.9	42.8	35.18	20.58
1.83V	232	148.8	109.6	86.9	72.7	46.4	41.5	34.02	18.80
1.85V	227	142.8	107.1	84.9	70.0	45.2	40.6	33.50	17.43

High Temperature Batteries

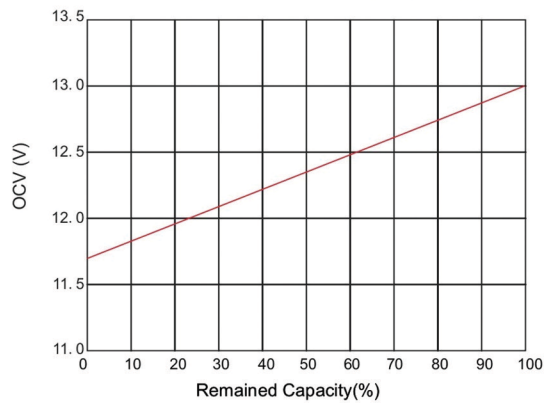
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



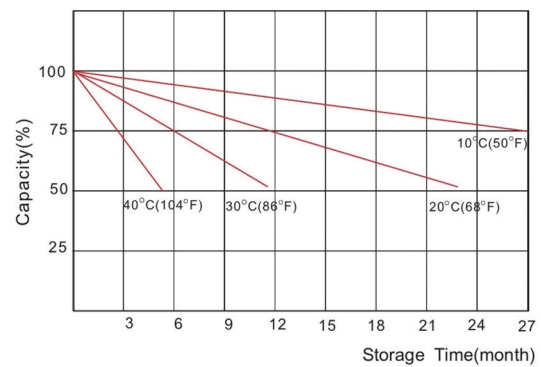
Battery Voltage Vs. Charge Time



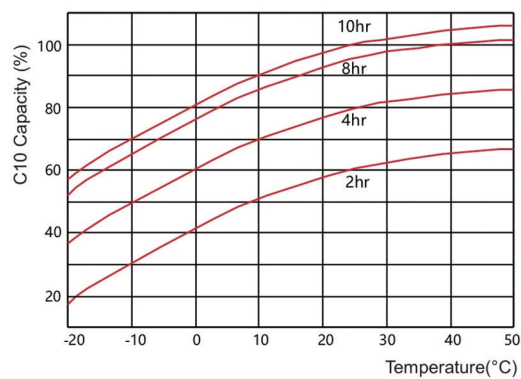
Relationship of OCV Vs. State of Charge



Capacity Retention Characteristic



Capacity vs temperature curve



Float life vs temperature curve

