

- Unique European energy storage technology
- Fully certified
- Specially designed to use for all solar applications even in extreme temperature conditions
- Super long life time, leakage and maintenance free
Terminals at the front for easy connection
- Durable and sustainable with extra long cycles



SPECIFICATION

Cells Per Unit	6
Voltage Per Unit	12
Capacity	65Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 22.2 Kg
Max. Discharge Current	325 A(5 sec)
Internal Resistance	Approx. 6 mΩ
Operating Temperature Range	Discharge: -20°C ~ 60°C Charge: 0°C ~ 50°C Storage: -20°C ~ 60°C
Normal Operating Temperature Range	25°C ± 5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	19.5 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	Hollandia batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Faston F5/F11
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.

Constant Current Discharge Characteristics Unit: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	243	174	127	75	42.3	25.9	17.0	14.0	11.1	8.0	6.8	3.6
1.67V	237	166	124	74	42.1	25.7	16.9	14.0	11.0	7.9	6.7	3.5
1.70V	223	160	122	73	41.7	25.5	16.8	13.9	10.9	7.9	6.6	3.4
1.75V	200	148	116	71	41.3	25.4	16.7	13.8	10.8	7.8	6.6	3.4
1.80V	181	135	107	68	40.3	24.9	16.3	13.5	10.6	7.7	6.5	3.3
1.85V	157	120	96	64	38.3	23.8	15.5	12.8	10.1	7.3	6.3	3.1

Constant Power Discharge Characteristics Unit:W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	436	319	235	141	80.5	49.7	32.6	27.0	21.3	15.5	12.7	6.7
1.67V	427	304	230	139	80.1	49.5	32.6	27.0	21.2	15.4	12.5	6.6
1.70V	403	294	227	137	79.6	49.1	32.4	26.8	21.1	15.3	12.5	6.6
1.75V	363	272	216	134	78.8	48.6	32.2	26.7	20.9	15.1	12.4	6.5
1.80V	326	247	199	128	76.8	47.9	31.4	25.9	20.6	14.8	12.2	6.4
1.85V	282	219	177	120	72.8	45.7	29.8	24.7	19.6	14.3	11.8	6.2

All mentioned values are average values.



HP12-65D

12V65Ah

Charging Procedures (12V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.7	14.4 ~ 15.0	0.3C
Standby	25°C	13.7	13.6 ~ 13.8	0.3C

Charge the batteries at least once every six months, if they are stored at 25°C

Constant Voltage	14.4~15.0V, 5~11h, Max. Current 0.1CA
Constant Current	0.1CA×5h
Fast	0.3CA×1.7h

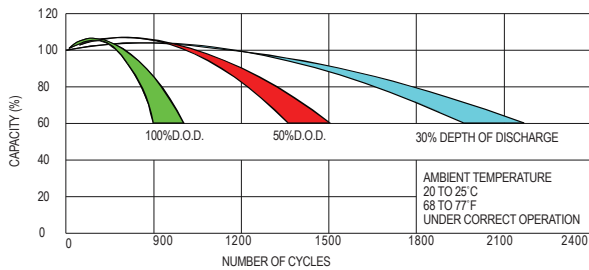
Discharge Current vs. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	$(A) \leq 0.2C$	$0.2C < (A) < 1.0C$	$(A) \geq 1.0C$

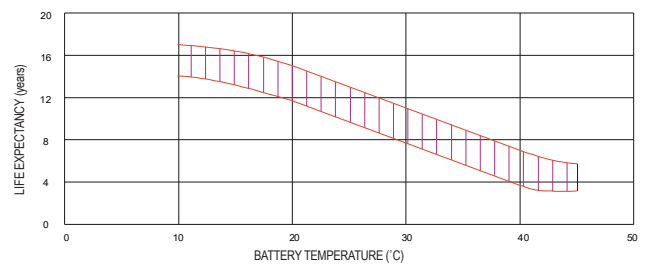
Charging Procedures (6V series)

Application	Charge Voltage (V)			Max Current Charge
	Temperature	Set point	Allowable range	
Cycle Use	25°C	7.35	7.25 ~ 7.45	0.3C
Standby	25°C	6.85	6.8 ~ 6.9	0.3C

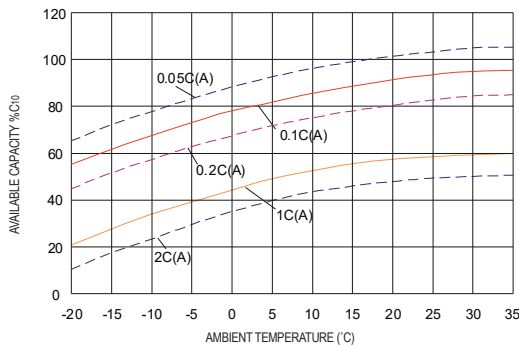
LIFE CHARACTERISTICS OF CYCLIC USE



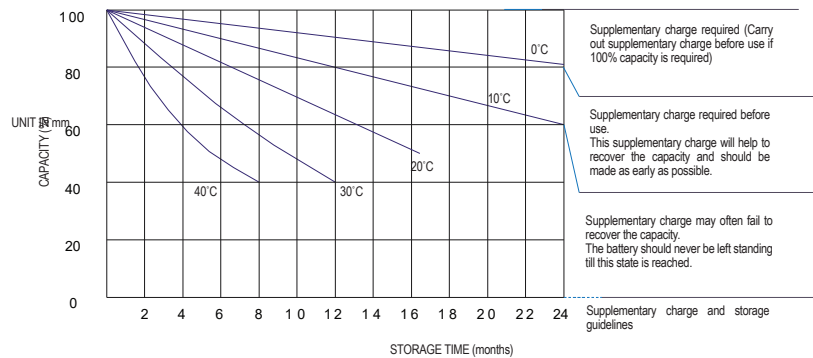
EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



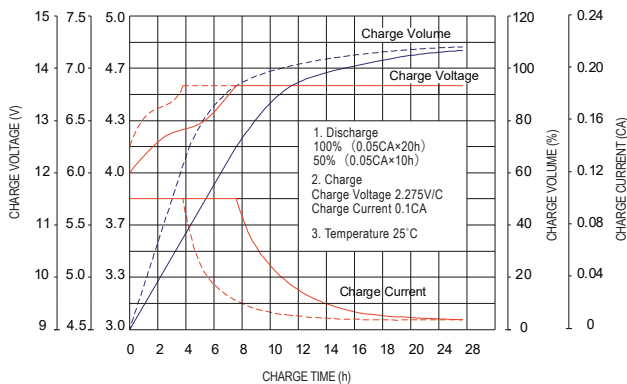
TEMPERATURE EFFECTS CURVE



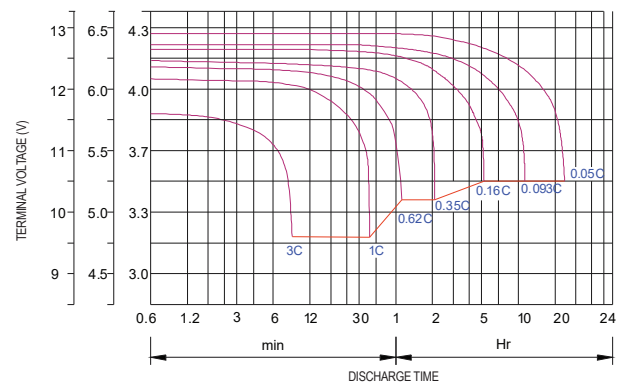
STORAGE CHARACTERISTIC



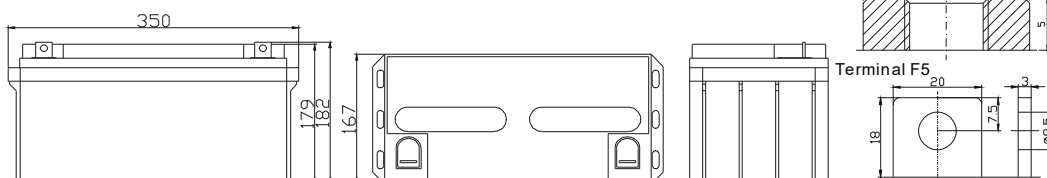
CHARGE CHARACTERISTIC CURVE FOR STANDBY USE



DISCHARGE CHARACTERISTIC CURVE



DIMENSIONS



Terminal F11



OUR PARTNER:



HP12-65D