



# RA12-125F (12V125Ah)

RA12-125F is front terminal type, designed for Telecom and UPS use with 10 years life time based Eurobat standard. As with all Ritar batteries, all front terminal models are rechargeable, highly efficient, leak proof and maintenance free.



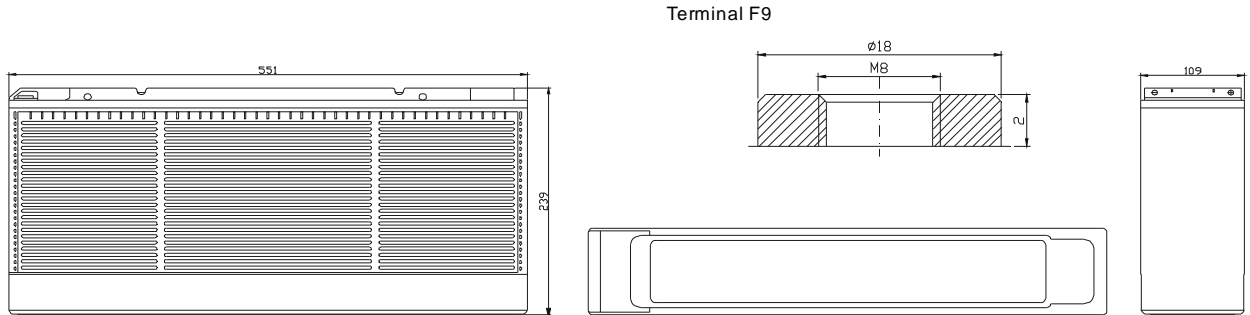
## Specification

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	125Ah@10hr-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx. 36.0 Kg
<b>Max. Discharge Current</b>	500 A (5 sec)
<b>Internal Resistance</b>	Approx. 5 mΩ
<b>Operating Temperature Range</b>	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Float charging Voltage</b>	13.6 to 13.8 VDC/unit Average at 25°C
<b>Recommended Maximum Charging Current Limit</b>	30 A
<b>Equalization and Cycle Service</b>	14.4 to 15.0 VDC/unit Average at 25°C
<b>Self Discharge</b>	RITAR 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.
<b>Terminal</b>	Terminal F9/Thread insert & Bolt (M8)
<b>Container Material</b>	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.



## Dimensions

Unit: mm



### 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	468	335	244	144	81	50	33	27	21	15	13	7
1.67V	455	319	239	141	81	50	33	27	21	15	13	7
1.70V	429	308	235	140	80	49	32	27	21	15	13	7
1.75V	385	284	224	137	79	49	32	27	21	15	13	7
1.80V	348	259	206	131	78	48	31	26	20	15	13	6
1.85V	303	231	185	122	74	46	30	25	20	14	12	6

### 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	838	613	451	270	155	96	63	52	41	30	24	13
1.67V	821	585	442	267	154	95	63	52	41	30	24	13
1.70V	775	566	436	264	153	94	62	52	41	29	24	13
1.75V	698	523	416	258	152	94	62	51	40	29	24	13
1.80V	628	475	382	246	148	92	60	50	40	29	24	12
1.85V	542	422	341	231	140	88	57	48	38	28	23	12

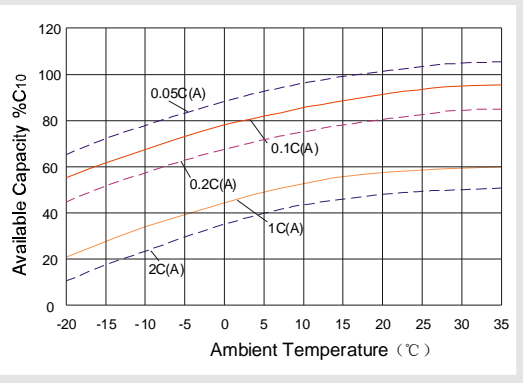
All mentioned values are average values.

# RA12-125F

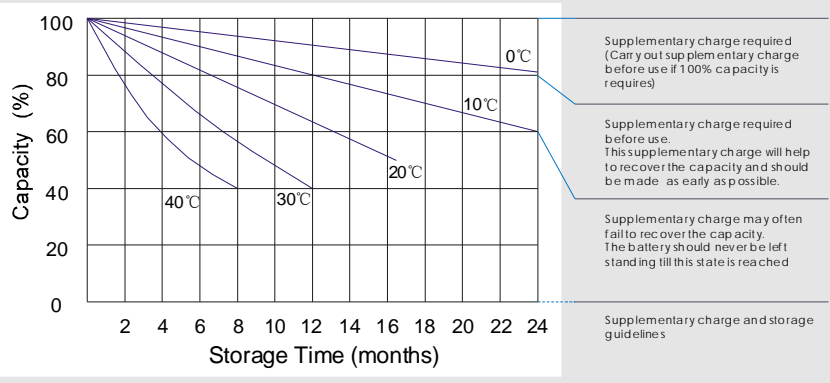
# 12V125Ah



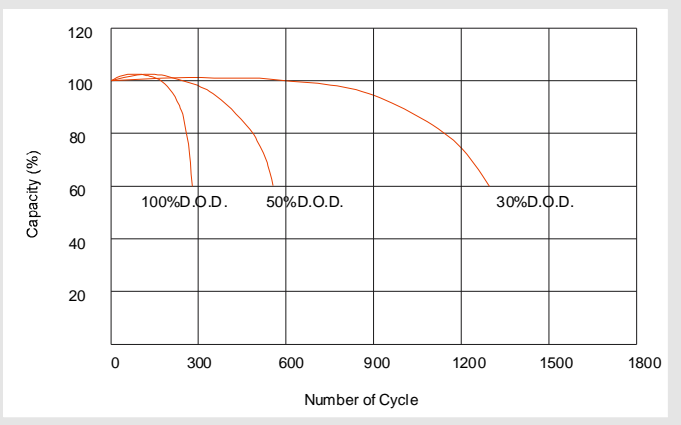
## Temperature effects curve



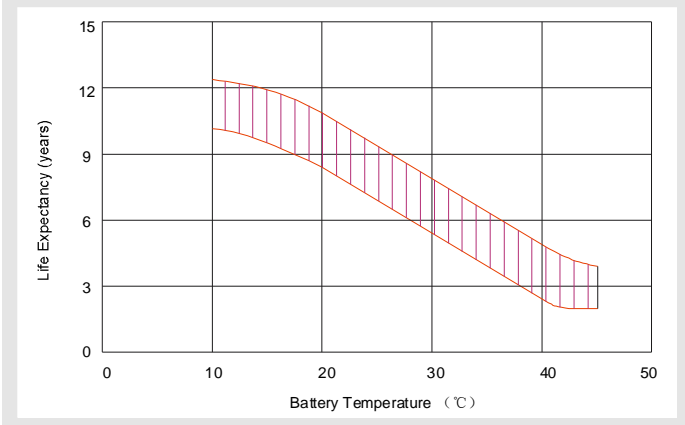
## Storage characteristic



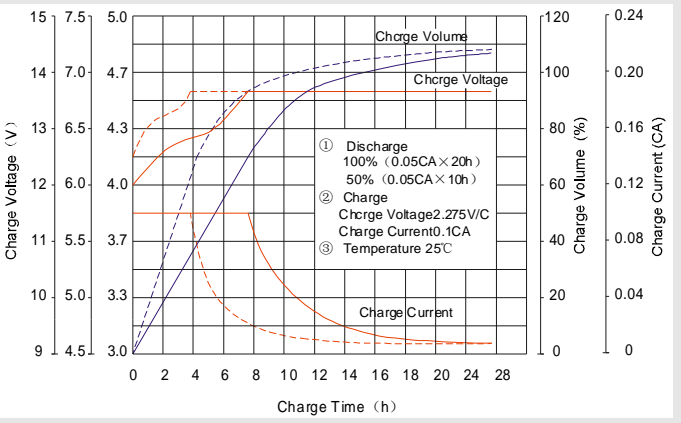
## Life characteristics of cyclic use



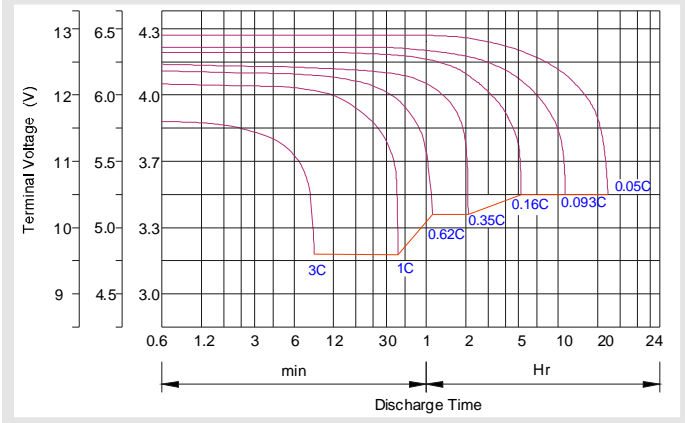
## Effect of temperature on long term float life



## Charge characteristic Curve for standby use



## Discharge characteristic Curve



## 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

## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

## Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	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

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

Charging Method:

Constant Voltage	-0.2Cx2h +14.4~15.0V,24h,Max. Current 0.3CA
Constant Current	-0.2Cx2h +0.1CAx12h
Fast	-0.2Cx2h +0.3CAx4h

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