

Battery with over 12 years of the design life at 20°C - according to Eurobat (10 years at 25°C), made in the AGM technology. It has a special case construction that allows mounting in 19" and 23" cabinets. The EPL FTN series are equipped with Central Degassing System, which can lead the small amount of gas liberated during operation outside the sealed cabinet in which the batteries are installed. Battery has repeatable parameters and excellent discharge characteristics and this is why they are very often and readily used for the standby use in important telecommunication systems.



TECHNICAL DATA

Nominal voltage	12 V	
Nominal capacity	60 Ah / C ₁₀	
Cell per unit	6	
Technology	AGM	
Design life	over 12 years @ 20°C* 10 years @ 25°C	
Dimensions	height	260,0 mm
	length	280,0 mm
	width	105,0 mm
Weight	~20 kg	
Capacity @ 25°C	20h	3,21A @ 1,80V/cell. 64,2 Ah
	10h	6,00A @ 1,80V/cell. 60,0 Ah
	5h	10,9A @ 1,75V/cell. 54,5 Ah
	1h	43,8A @ 1,60V/cell. 43,8 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-20°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤9,05 mΩ
Charging voltage @ 20°C	standby use	13,4V do 13,6V (-18 mV/°C)
	cycle use	14,1 V do 14,4V (-24 mV/°C)
Charging current	recommended	6 A
	maximum	15 A
Capacity retention during storage @ 20°C (self discharge)	after 1 month	98 %
	after 6 months	86 %
	after 12 months	73 %
Container material	standard	ABS UL 94-HB
	optional	ABS UL 94-V0**
Terminal	insert terminal	I2
Terminal hardware initial torque	8,0 Nm	

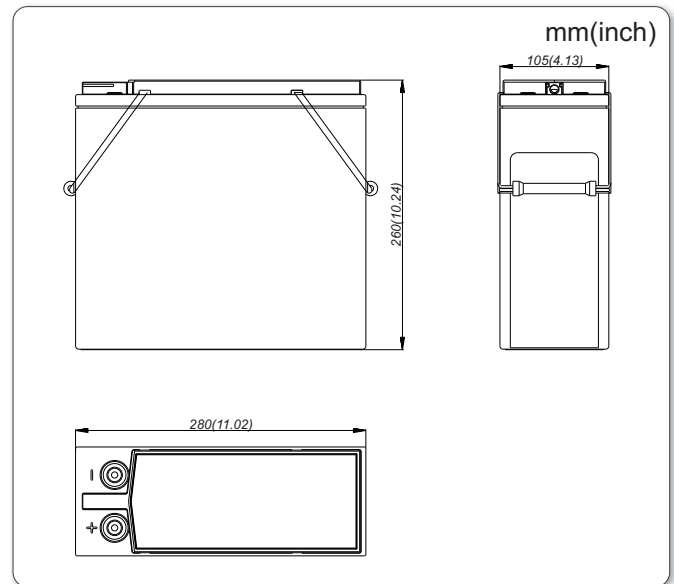
* - According to Eurobat (Long Life group)

** - Flame-retardant

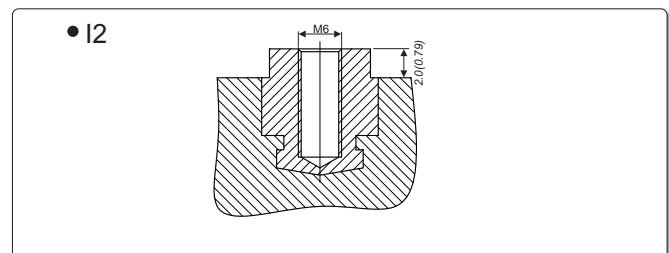
APPLICATIONS

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication power plants
- telecommunication PABX
- GSM base stations
- server rooms

DIMENSIONS



TERMINALS



NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

DISCHARGE CHARACTERISTICS

• Constant current (Current [A], 25°C / 77°F)

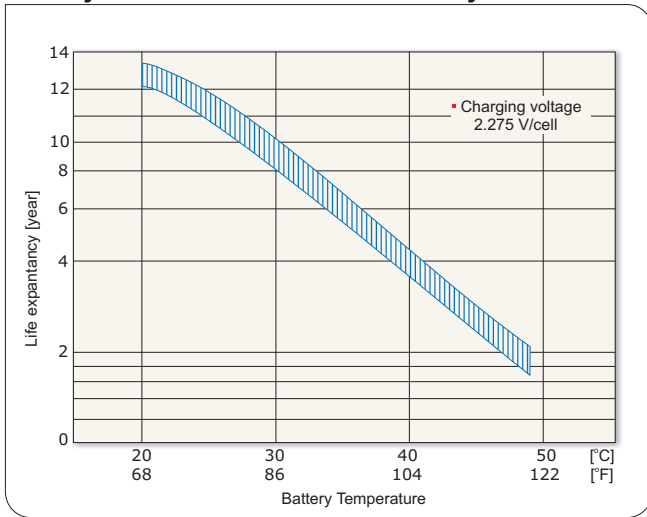
F.V. V/cell	Discharge time											
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	20h	
1,85	171	98,8	63,4	47,6	38,4	16,0	10,4	8,95	7,02	5,81	3,11	
1,80	189	110	69,4	51,4	41,1	16,6	10,7	9,19	7,22	6,00	3,21	
1,75	207	116	71,8	52,9	42,1	16,8	10,9	9,31	7,31	6,08	3,25	
1,70	227	120	73,3	53,6	42,6	16,9	10,9	9,38	7,36	6,11	3,27	
1,67	237	124	75,0	54,6	43,2	17,0	11,0	9,41	7,38	6,12	3,28	
1,60	260	128	76,3	55,3	43,8	17,3	11,2	9,55	7,47	6,18	3,31	

• Constant power (Power [W/cell], 25°C / 77°F)

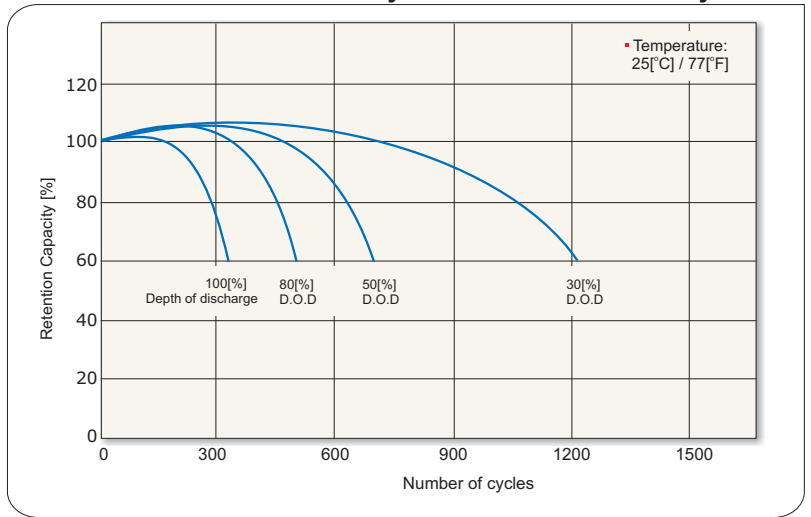
F.V. V/cell	Discharge time											
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	20h	
1,85	318	186	122	92,4	74,6	31,2	20,6	17,7	13,8	11,5	6,22	
1,80	347	203	131	99,4	79,3	32,0	20,9	18,0	14,2	11,8	6,39	
1,75	362	212	134	100	79,5	32,3	21,1	18,2	14,3	11,9	6,47	
1,70	390	216	134	101	80,4	32,5	21,2	18,3	14,4	12,0	6,51	
1,67	407	222	137	103	81,2	32,7	21,3	18,4	14,4	12,0	6,52	
1,60	435	228	138	103	82,3	33,2	21,6	18,6	14,6	12,1	6,58	

F.V. - Final voltage

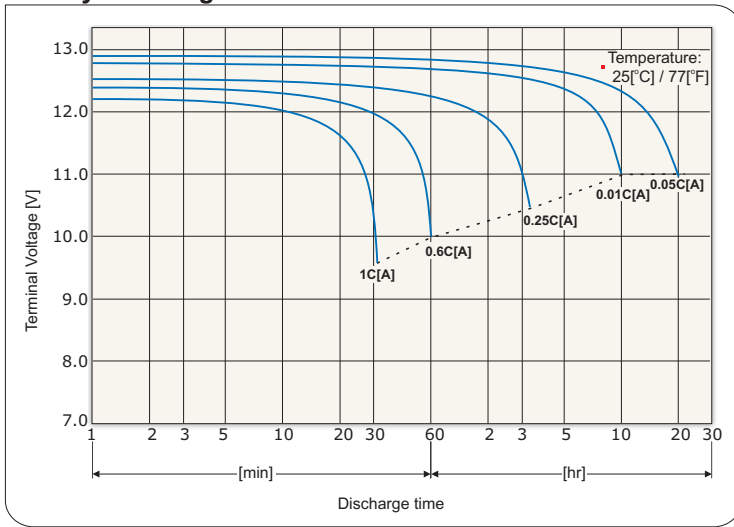
Battery life characteristics of standby use



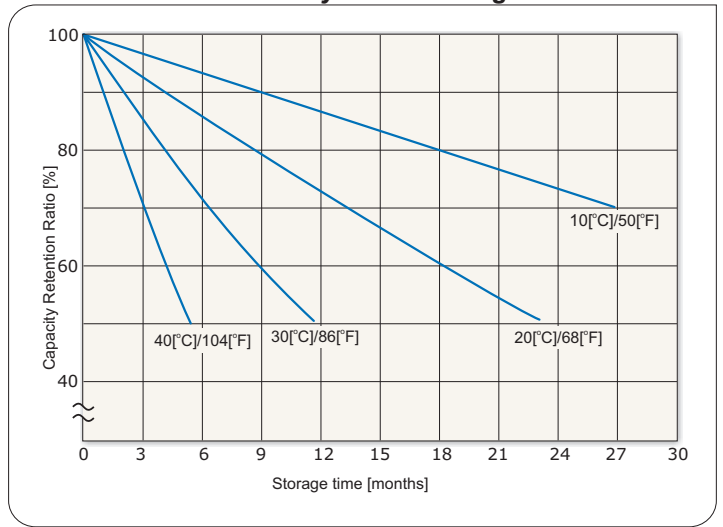
Battery life characteristics of cycle use



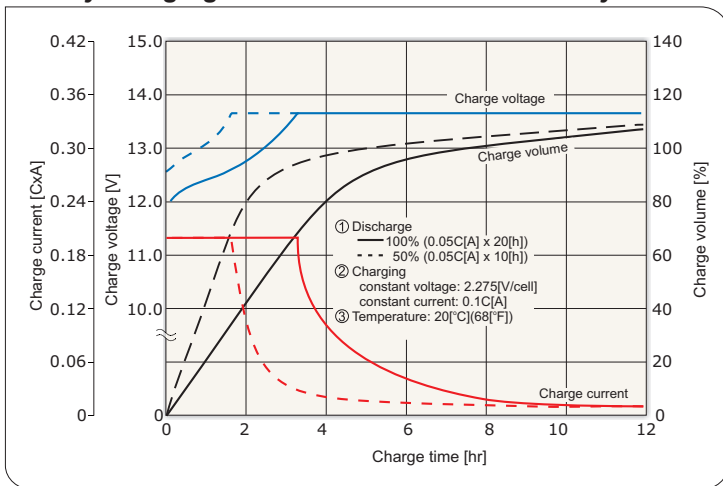
Battery discharge characteristics



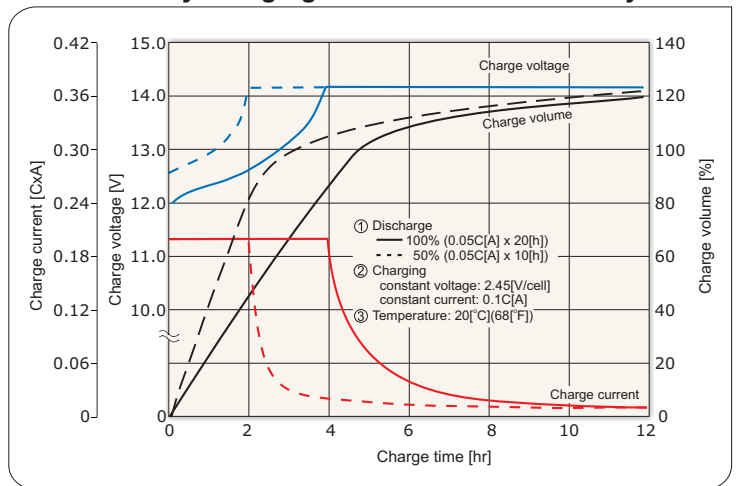
Battery self discharge characteristics



Battery charging characteristics for the standby use



Battery charging characteristics for the cycle use



Battery discharge current and final discharge voltage

Discharge current [A]	0.2C > I	0.2C ≤ I < 0.5C	0.5C ≤ I < 1.0C	1.0C ≤ I
Final discharge voltage [V/cell]	1.75	1.70	1.67	1.60



*) C - Capacity