

**EPL-FTNG series** are batteries with **over 12 years** of the design life at 20°C - according to Eurobat (10 years at 25°C), made in the **gel technology**. They have front terminals and a special case construction that allows them to be mounted in 19" and 23" cabinets. The EPL FTNG series is equipped with a **Central Degassing System**, consisting of a small conduit which can lead the small amount of gas liberated during operation outside the sealed cabinet in which the batteries are installed. EPL FTNG batteries have 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. Owing to the gel technology they are very often used for outdoor systems prone to large operating temperature changes.



### TECHNICAL DATA

Nominal voltage	12 V	
Nominal capacity	50 Ah / C <sub>10</sub>	
Cell per unit	6	
Technology	GEL	
Design life	over 12 years @ 20°C* 10 years @ 25°C	
Dimensions	height	2000,0 mm
	length	390,0 mm
	width	105,0 mm
Weight	~21,3 kg	
	Capacity @ 25°C	
Capacity @ 25°C	20h	2,77A @1,80V/cell. 55,4 Ah
	10h	5,14A @1,80V/cell. 51,4 Ah
	5h	9,60A @1,75V/cell. 48,0 Ah
	1h	35,7A @1,60V/cell. 35,7 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-40°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤8,94 mΩ
Charging voltage @ 20°C	standby use	13,5V do 13,8V (-18 mV/°C)
	cycle use	14,4 V do 15,0V (-24 mV/°C)
Charging current	recommended	5,0 A
	maximum	12,5 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		5,5 Nm

\*) - According to Eurobat (Very Long Life group)

\*\*) - Flame-retardant

### 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	127,9	76,7	51,1	38,5	31,4	13,4	8,87	7,63	5,97	4,91	2,71
1,80	143,5	86,0	55,9	41,4	33,9	14,3	9,39	8,10	6,33	5,14	2,77
1,75	160,0	92,2	58,5	43,2	34,7	14,4	9,60	8,25	6,38	5,20	2,80
1,70	174,0	95,3	59,0	43,5	35,3	14,5	9,65	8,30	6,44	5,25	2,81
1,67	175,6	96,9	60,1	43,8	35,5	14,6	9,81	8,41	6,44	5,25	2,81
1,60	187,0	100,5	61,1	44,2	35,7	14,9	9,86	8,46	6,49	5,30	2,84

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

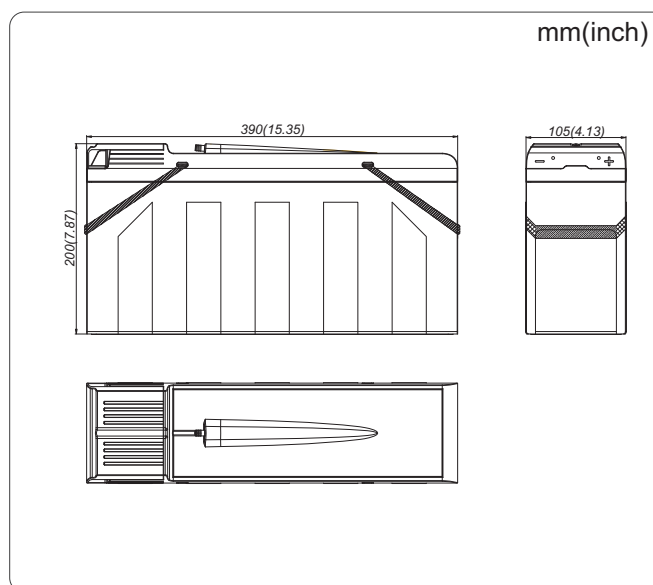
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	20h
1,85	229,4	144,3	97,6	74,7	60,8	26,1	17,4	15,0	11,8	9,80	5,43
1,80	256,9	161,4	106,4	80,4	65,5	27,5	18,2	15,8	12,3	10,1	5,53
1,75	279,7	170,7	109,0	82,0	66,0	27,5	18,6	16,0	12,3	10,1	5,53
1,70	300,0	171,8	109,5	82,5	67,0	27,8	18,6	16,0	12,4	10,1	5,53
1,67	301,5	173,9	109,5	82,5	67,0	27,8	18,8	16,1	12,5	10,2	5,53
1,60	313,5	177,0	110,5	83,0	67,5	28,2	18,8	16,2	12,6	10,3	5,58

F.V. - Final voltage

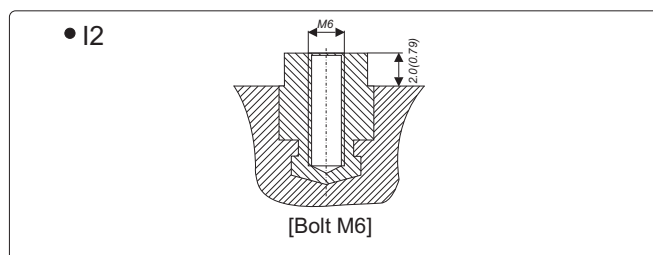
### APPLICATIONS

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

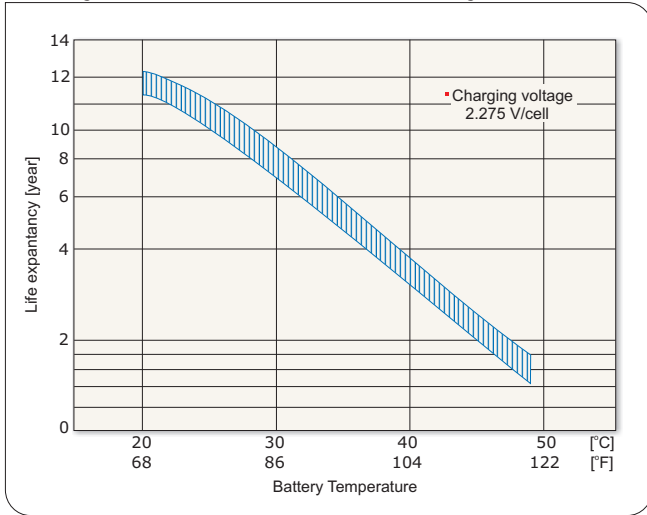
### DIMENSIONS



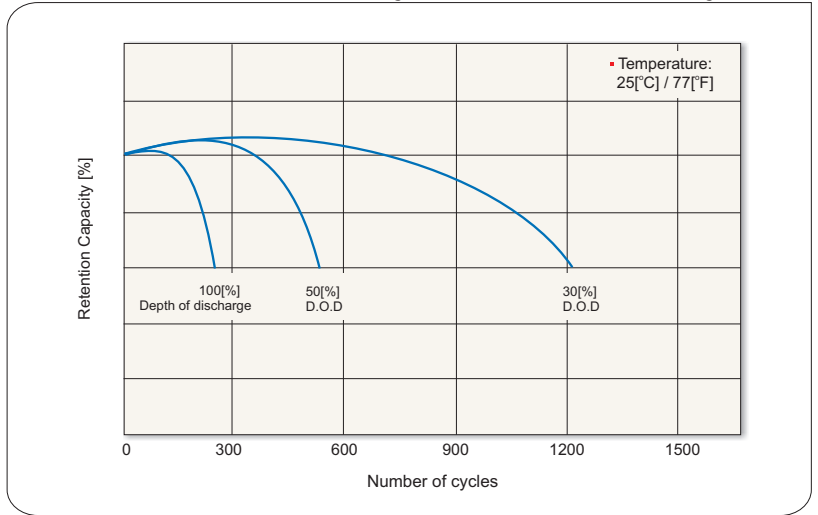
### TERMINALS



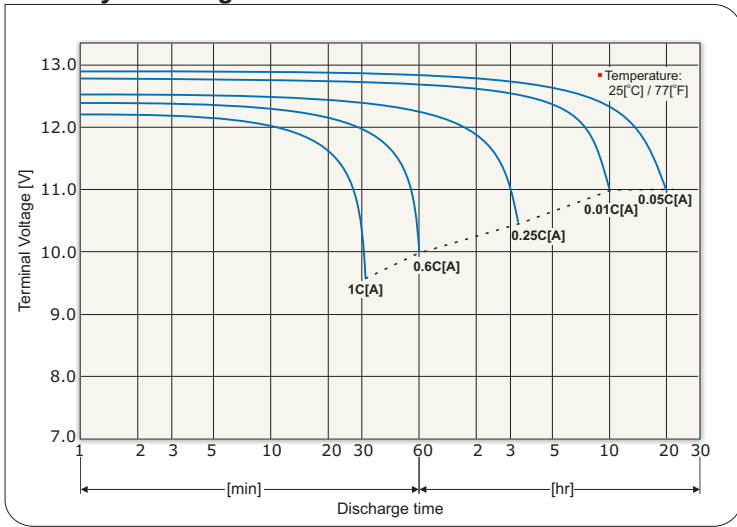
## Battery life characteristics of standby use



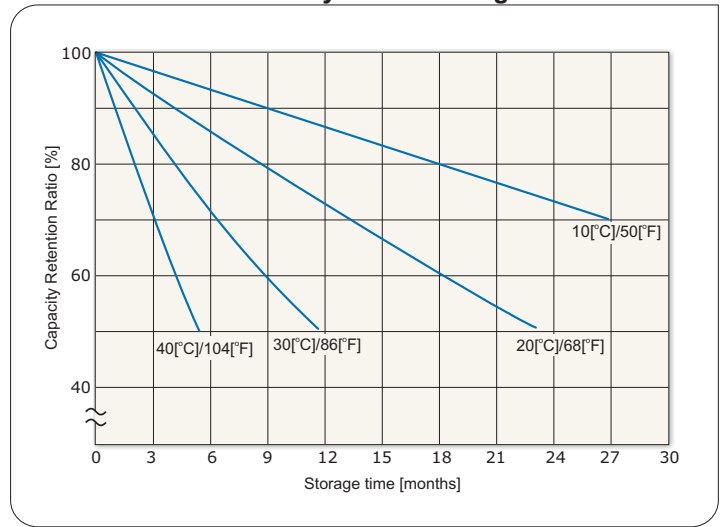
## Battery life characteristics of cycle use



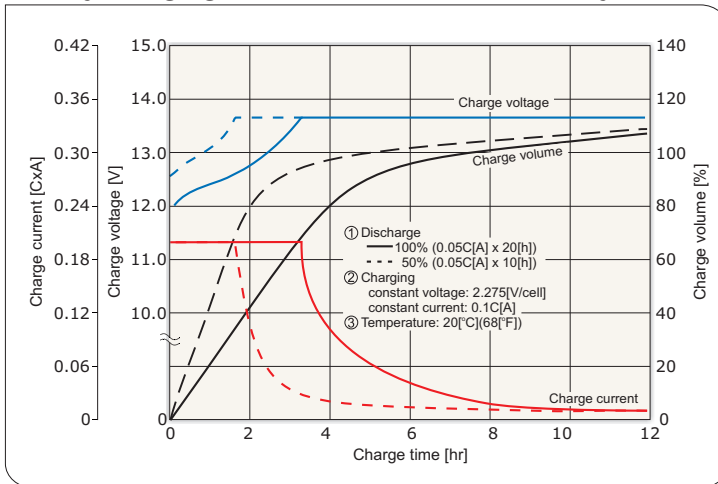
## Battery discharge characteristics



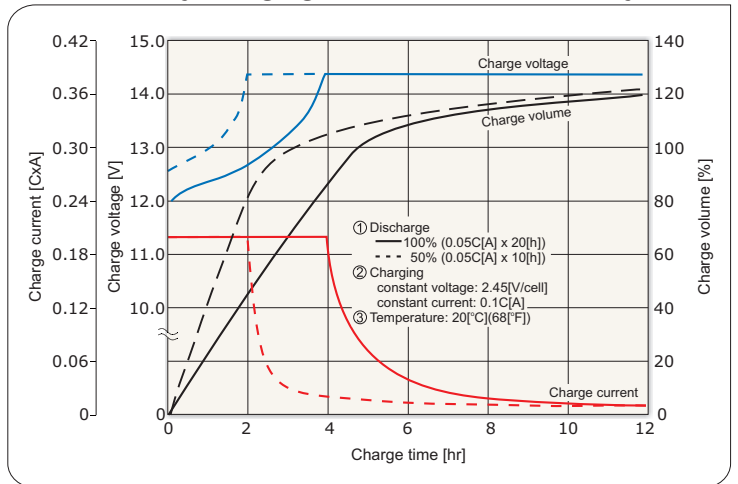
## Battery self discharge characteristics



## 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	1.55	1.30

\*) C - Capacity

