

CPW 450-12

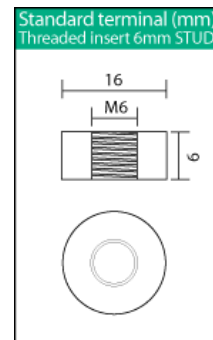
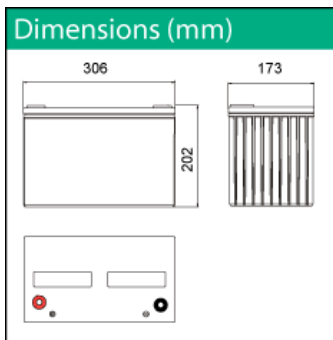


AGM High Rate, L
10 - 12 years design life

longlife series



5 YEARS OPTIONAL*



Nominal voltage	12 V	
Nominal Capacity (20HR,20 C):	90 Ah (1.75V/c)	
Nominal Power (10min):	440 W/c (1.60V/c)	
Internal resistance	Approx. 4m Ω	
Maximum charging current	26.4 A	
Maximum discharge current	800 A (5 sec.)	
Operating temperature range	-20 C 50 C	
Float use/ cycle use	13.5 – 13.8V/ 14.4 – 15.0V	
Expected life (20 C)	10 – 12 years in float (EUROBAT)	
Standard terminal	Threaded insert 6mm (torque 5.5Nm+/-5%)	
Housing material	PP (UL94-HB)	
Dimensions	length	306 mm
	width	173 mm
	height	202 mm (2 mm)
Approx. Weight	29.8 kg	
Packing	1 pcs/box	

Typical applications:

- UPS systems
- High current applications
- Computerized data bases
- Life support equipment
- Air traffic power stations
- Security systems

Valve Regulated Maintenance Free
Absorbent Glassmat Technology
Complies with IEC61056-21/22,
JIS C 8702, GB/T 19639, UL
Low self discharge
Classified as non- spillable and Non
Dangerous goods by IATA, FAA, ADR,
IMDG
Can be discharged or stored in any
position without leakage
Cannot be charged while the terminal is
downward.

*** WARRANTY VALID FOR
STAND-BY USE ONLY**

Constant Current Discharge (Ampères) at 25 °C (77°F)

F.V/TIME	5min	10min	15min	20min	25min	30min	40min	45min	50min	60min	75min	90min	120min	150min
1.75V/cell	318,0	217,0	174,0	142,0	121,0	105,00	83,00	75,11	70,00	60,50	49,42	43,00	34,40	28,48
1.70V/cell	339,0	226,0	180,0	146,0	124,0	107,00	85,00	76,92	71,00	61,20	49,99			
1.67V/cell	348,5	231,2	183,6	148,0	125,2	108,35	85,57	77,48	71,78	61,71				
1.65V/cell	352,0	233,0	185,0	149,0	126,0	109,00	86,00	77,83	72,00					

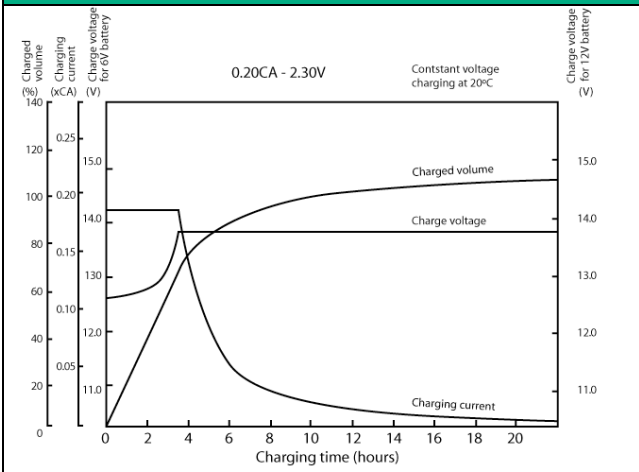
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/TIME	5min	10min	15min	20min	25min	30min	40min	45min	50min	60min	75min	90min	120min	150min
1.75V/cell	582	410	336	276	237	207,0	165,8	150,1	139,2	120,0	98,0	85,3	68,8	57,0
1.70V/cell	621	427	347	283	241	210,3	168,2	152,2	140,8	121,3	99,1			
1.67V/cell	640	436	352	286	244	211,4	169,3	153,3	141,9	122,3				
1.65V/cell	646	440	355	288	245	212,7	170,2	154,0	142,3					

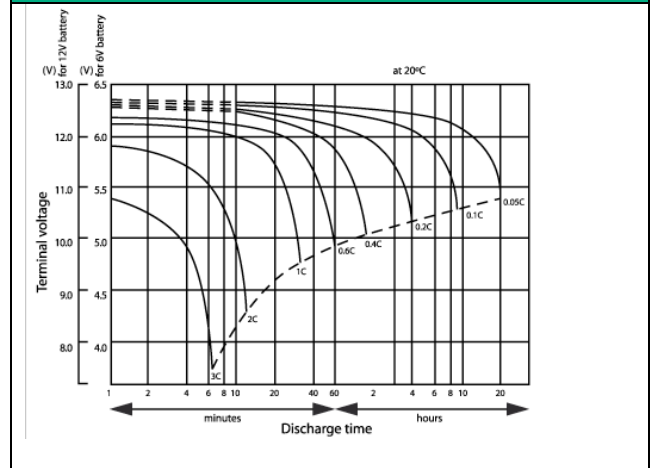
Constant Current / Power Discharge (Ampères / Watts) at 25 °C (77°F)

F.V/TIME	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h	24h
1.75V/cell	23,56A	18,63A	15,300A	13,237A	11,551A	10,324A	9,641A	8,800A	7,385A	4,576A	3,840A
1.75V/cell	47,12W	37,26W	30,60W	26,48W	23,10W	20,65W	19,28W	17,60W	14,77W	9,15W	7,68W

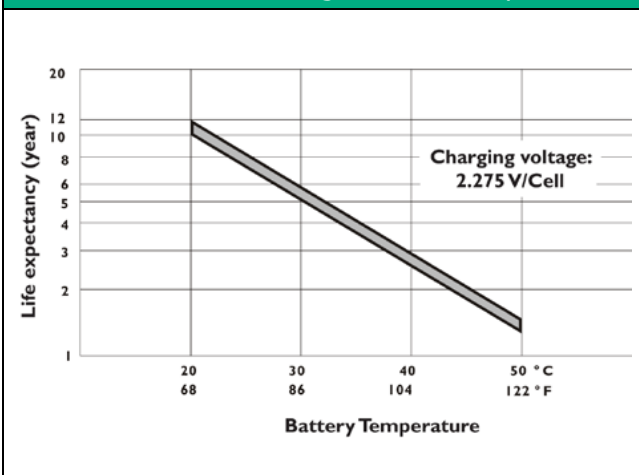
Charging Characteristics



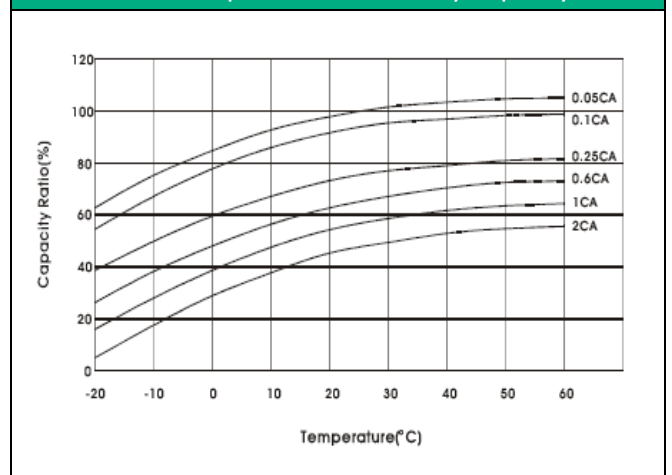
Discharge characteristics curves



Correlation between design life and temperature



Influence of temperature on battery capacity



Models available, Constant Power Discharge (Watts/cell) at 25°C (77°F) 1.75V/c – Time, Weight

model/minutes	5	10	15	20	25	30	40	45	50	60	75	90	120	150	Weight
CPW 30 – 12	42	28	20	16	14	12,3	9,3	8,5	7,8	6,8	5,6	4,8	3,8	3,1	1.80 kg
CPW 35 – 12	49	34	26	21	17	15,4	12,0	11,0	10,1	8,7	7,2	6,1	4,8	4,0	2.54 kg
CPW 35 – 12L	49	34	26	21	17	15,4	12,0	11,0	10,1	8,7	7,2	6,1	4,8	4,0	2.54 kg
CPW 50 – 12	69	45	32	27	23	20,1	15,3	13,9	12,8	11,2	9,1	7,9	6,2	5,1	2.75 kg
CPW 80 – 12	115	75	53	45	38	33,5	25,5	23,2	21,3	18,6	15,2	13,1	10,3	8,5	4.20 kg
CPW 110 – 12	169	111	78	65	56	49,2	37,4	34,0	31,2	27,3	22,3	19,2	15,1	12,5	6.50 kg
CPW 140 – 12	196	136	105	84	70	62,2	48,5	44,7	41,1	35,4	29,1	24,7	19,4	16,1	9.60 kg
CPW 160 – 12	230	159	123	97	81	72,4	56,5	52,1	47,8	41,2	33,8	28,8	22,6	18,8	11.25 kg
CPW 200 – 12	279	192	149	118	99	87,8	68,5	63,1	58,0	50,0	41,0	34,9	27,4	22,8	14.30 kg
CPW 270 – 12	356	250	205	168	145	126,5	101,3	91,7	85,0	73,3	59,9	52,2	42,0	34,8	17.80 kg
CPW 390 – 12	518	364	298	245	211	184,0	147,2	133,2	123,8	106,7	87,1	75,8	61,0	50,5	26,00 kg
CPW 450 – 12	582	410	336	276	237	207,0	165,8	150,1	139,2	120,0	98,0	85,3	68,8	57,0	29.80 kg
CPW 530 - 12	712	501	410	337	289	253,0	202,7	183,4	170,1	146,7	119,8	104,3	84,1	69,6	34.30 kg
CPW 650 – 12	754	614	503	413	355	310,5	248,8	225,1	208,8	180,0	147,0	128,0	103,2	85,4	41,10 kg
CPW 750 - 12	866	704	578	475	408	356,5	285,7	258,5	239,7	206,7	168,8	147,0	118,5	98,1	45,50 kg

* low rate discharge (over 2h) not recommended