

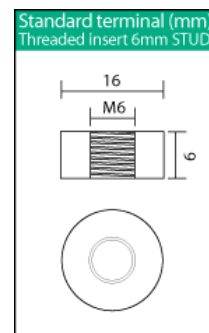
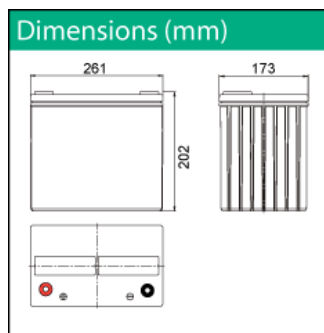
CPW 390-12

AGM High Rate, L  
10 -12 years design life

longlife series



5 YEARS OPTIONAL\*



Nominal voltage	12 V	
Nominal Capacity (20HR,20°C):	80 Ah (1.75V/c)	
Nominal Power (10min):	391 W/c (1.65V/c)	
Internal resistance	Approx. 4m Ω	
Maximum charging current	23.4 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	261 mm
	width	173 mm
	height	215 mm with handle (±2 mm)
Approx. Weight	26 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	283,0	193,0	155,0	126,0	108,0	93,00	74,00	66,97	62,00	53,80	43,94	38,30	30,50	25,25
1.70V/cell	301,0	201,0	160,0	129,0	111,0	95,00	75,00	67,87	63,00	54,40	44,43			
1.67V/cell	309,9	205,4	162,8	131,1	111,3	95,43	75,62	68,47	63,81	54,82				
1.65V/cell	313,0	207,0	164,0	132,0	112,0	96,00	76,00	68,78	64,00					

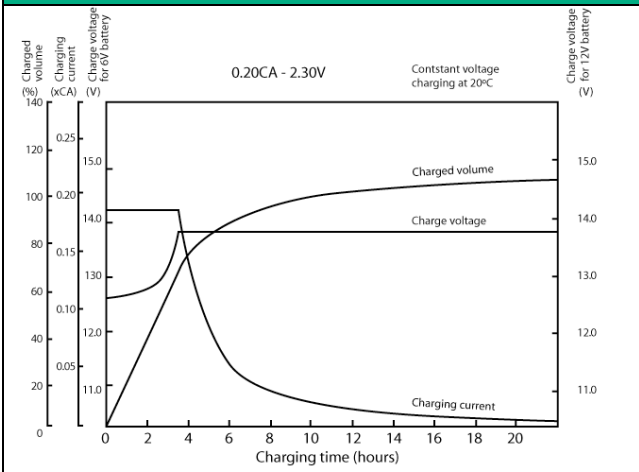
**Constant Power Discharge (Watts) at 25 °C (77°F)**

F.V/TIME	5min	10min	15min	20min	25min	30min	40min	45min	50min	60min	75min	90min	120min	150min
1.75V/cell	518	364	298	245	211	184,0	147,2	133,2	123,8	106,7	87,1	75,8	61,0	50,5
1.70V/cell	552	380	308	251	215	186,8	149,3	135,1	125,3	108,0	88,2			
1.67V/cell	569	388	313	254	216	187,9	150,4	136,2	126,1	108,8				
1.65V/cell	575	391	315	256	218	189,0	151,2	136,8	126,5					

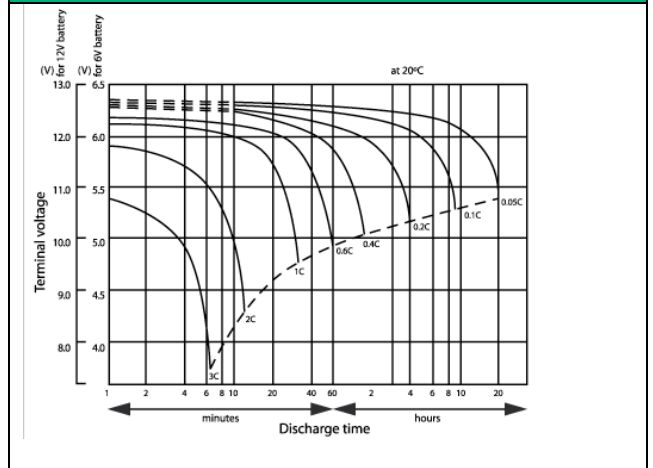
**Constant Current / Power Discharge (Ampères / Watts) at 25 °C (77°F)**

F.V/TIME	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h	24h
1.75V/cell	20,78A	16,45A	13,600A	11,683A	10,214A	9,135A	8,485A	7,800A	6,476A	4,026A	3,376A
1.75V/cell	41,76W	33,03W	27,20W	23,47W	20,48W	18,30W	17,09W	15,60W	13,09W	8,11W	6,81W

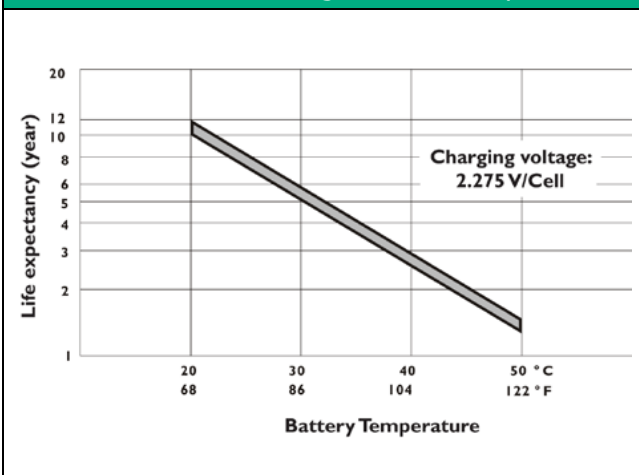
### Charging Characteristics



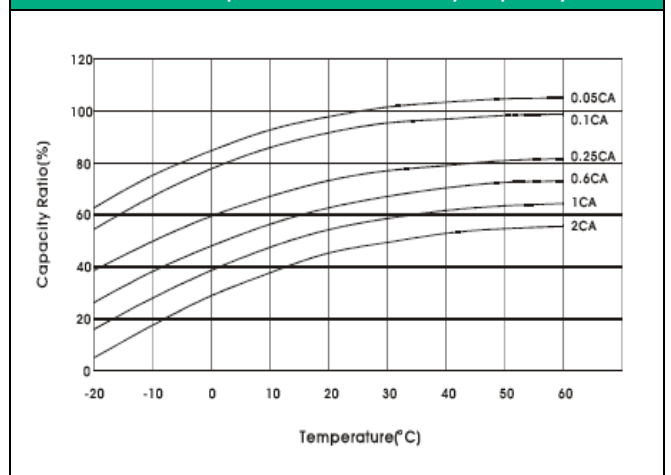
### Discharge characteristics curves



### 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