

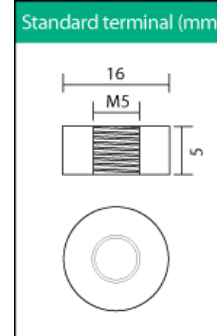
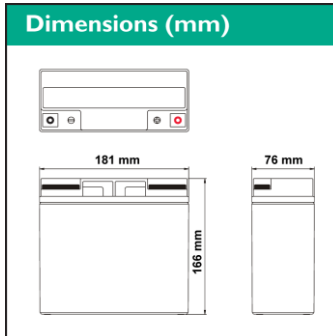
CPW 110-12



**AGM High Rate, Longlife series
10-12 years design life**



5 YEARS OPTIONAL*



Nominal voltage	12 V	
Nominal Capacity (20HR,20 C):	21 Ah (1.75V/c)	
Nominal Power (10min):	119 W/c (1.65V/c)	
Internal resistance	Approx. 9m Ω	
Maximum charging current	6.0 A	
Maximum discharge current	300 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 5 mm (torque 4.0Nm+/-5%)	
Housing material	ABS (UL94-HB, UL94-V0 optional)	
Dimensions	length	181 mm
	width	76 mm
	height	166 mm (2 mm)
Approx. Weight	6.50 kg	
Packing	2 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, 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	90,6	58,2	40,7	33,6	28,8	25,01	18,86	17,12	15,65	13,64	11,14	9,60	7,53	6,24
1.70V/cell	98,0	60,3	42,0	34,6	29,5	25,54	19,20	17,39	15,88	13,80	11,27			
1.67V/cell	102,5	62,1	42,9	35,2	29,7	25,57	19,28	17,50	16,01	13,83				
1.65V/cell	103,5	62,6	43,2	35,4	29,9	25,72	19,37	17,58	16,05					

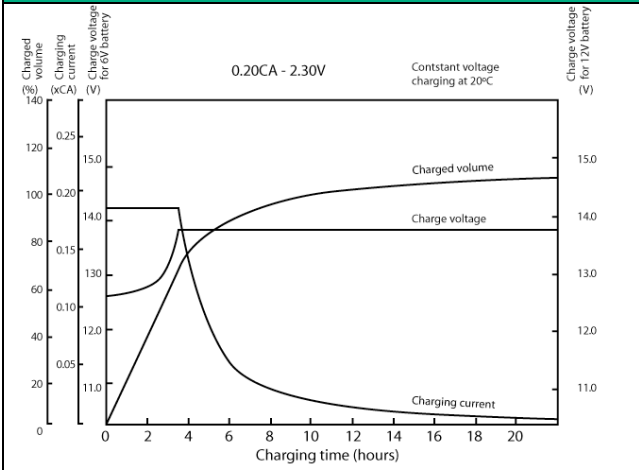
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/TIME	5min	10min	15min	20min	25min	30min	40min	45min	50min	60min	75min	90min	120min	150min
1.75V/cell	169	111	78	65	56	49,2	37,4	34,0	31,2	27,3	22,3	19,2	15,1	12,5
1.70V/cell	180	115	81	67	58	50,2	38,1	34,6	31,6	27,6	22,5			
1.67V/cell	188	118	83	68	58	50,3	38,2	34,8	31,9	27,7				
1.65V/cell	190	119	83	69	59	50,6	38,4	34,9	32,0					

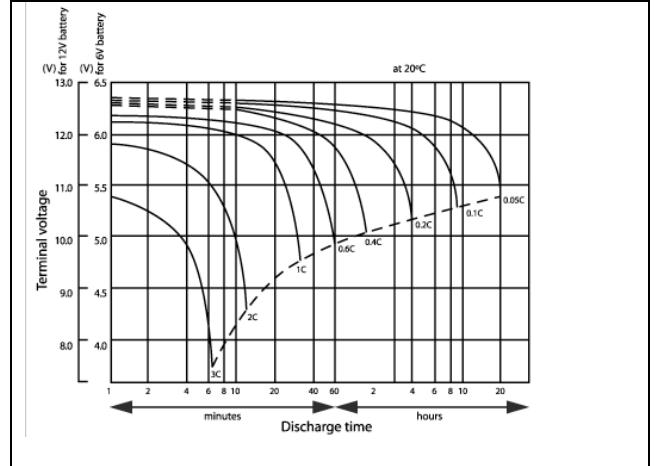
Constant Current / Power Discharge (Ampères / Watts) at 25 °C (77°F)

F.V/TIME	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h	24h
1.75V/cell	5,27A	4,23A	3,612A	3,118A	2,720A	2,432A	2,202A	2,010A	1,683A	1,052A	0,883A
1.75V/cell	10,53W	8,46W	7,22W	6,24W	5,44W	4,86W	4,40W	4,02W	3,37W	2,10W	1,77W

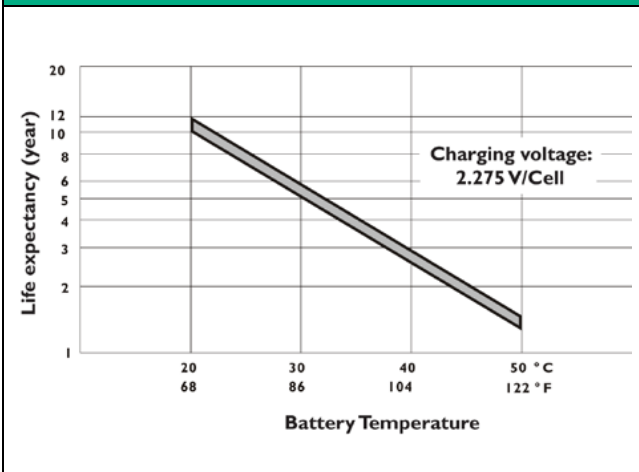
Charging Characteristics



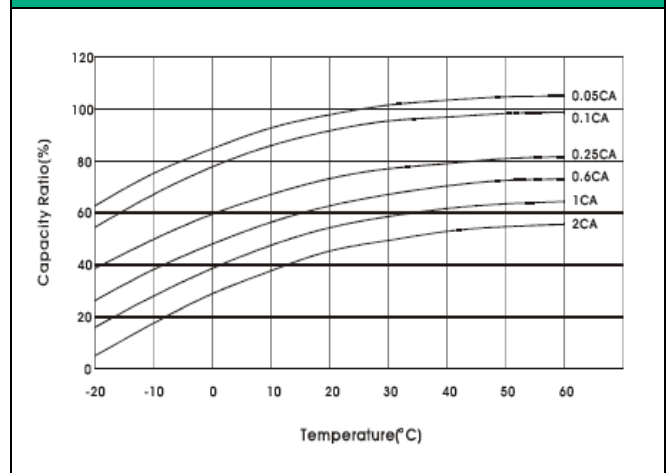
Discharge characteristics curves



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