

UPLUS UPS BATTERY

**US Series
-General Purpose**

**UCP Series
-High Power**

UPLUS
NEW TECHNOLOGY BATTERY

**UPLUS
ENERGY TECHNOLOGY CO., LTD**

US SERIES

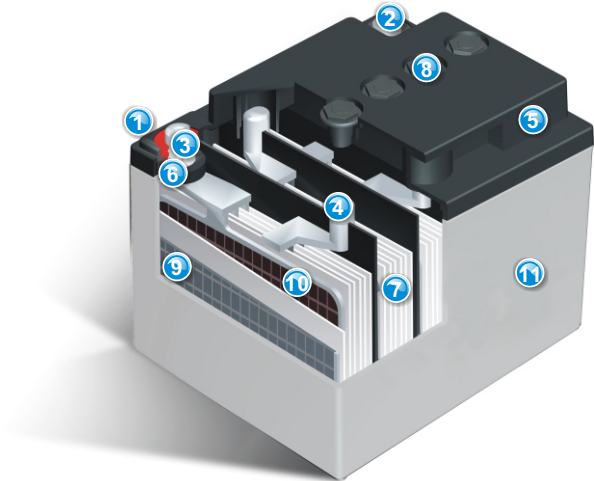
Features

- VRLA:**
Using oxygen recombination technology:
maintenance-free
- Grid:**
PbCaSn alloy for plate grids
less gassing, less self-discharging
- Separator:**
High quality AGM separator
extend cycle life and prevent micro short circuit
- Container:**
ABS material
increase the strength of battery container.
(Flame-retardant ABS is optional);
- Chemicals:**
High purity raw material
ensure low self discharge rate
- Terminals:**
Silver-coated copper terminals (T1, T2 terminal),
brass insert terminals
lead terminals
improve the electric conductivity



Battery Constructure

- ① Sealing Compound Epoxy
- ② Negative Terminal Post
- ③ Positive Terminal Post
- ④ Inter-cell Connector
- ⑤ Container Cover
- ⑥ Sealing O-Ring
- ⑦ AGM Separator
- ⑧ Safe Vent Valve
- ⑨ Negative Plate
- ⑩ Positive Plate
- ⑪ Case



Application

- All purpose
- Railway signal
- Aircraft signal
- Emergency light
- DC power supply
- Auto control system
- Alarm and security system
- Electric Power System (EPS)
- Communication power supply
- Emergency backup power supply
- Electronic apparatus and equipment
- Uninterruptable Power Supply (UPS)

US Models and Parameters

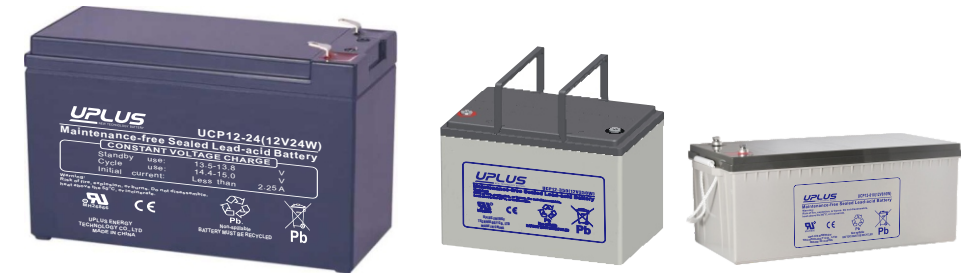
Model	Rated Voltage(V)	Capacity C ₁₀ (AH)	Power 15min(W)	Dimension/mm				Terminal	Weight/Kg
				Length	Width	Height	Total Height		
				mm	mm	mm	mm		
US12-5.4	12	5.4	5.0	90	70	70	107	T1/T2	1.65
US12-7.2	12	7.2	6.7	151	65	65	99	T1/T2	2.35
US12-8.5	12	8.5	7.9	151	65	65	99	T1/T2	2.45
US12-12	12	12.0	11.2	151	98	98	101	T1/T2	3.50
US12-18	12	18.0	16.7	181.5	77	77	167.5	T3/T12	5.40
US12-26	12	26.0	24.2	166	175	175	125	T3/T12	8.00
US12-33	12	33.0	30.7	195	130	130	178	T5/T6	10.5
US12-38	12	40.0	38.0	197	165	165	170	T6/T12	12.2
US12-45	12	46.8	45.0	197	165	165	170	T6	14.2
US12-55	12	57.2	55.0	229	138	138	226	T6	16.5
US12-65	12	65.0	65.0	348	167	167	178	T6	19.2
US12-75	12	78.0	75.0	259	168	168	214	T6	22.3
US12-80	12	83.2	80.0	259	168	168	214	T6	24.0
US12-90	12	93.6	90.0	330	173	173	220	T11	28.0
US12-100	12	104.0	100.0	330	173	173	220	T11	30.4
US12-120	12	124.8	120.0	408	177	177	225	T11	35.0
US12-135	12	140.4	135.0	345	172	172	280	T11	41.2
US12-150	12	156.0	150.0	483	170	170	238.5	T11	43.5
US12-180	12	187.2	180.0	532	207	207	220	T11	52.8
US12-200	12	208.0	200.0	522	240	240	224	T11	61.0
US12-250	12	260.0	250.0	522	268	268	226	T11	73.0
US2-300	12	316	300	170	150	328	350	T11	17.7
US2-400	12	420	400	210	175	330	350	T11	24.3
US2-450	12	472	450	210	175	330	350	T11	27.0
US2-500	12	526	500	240	175	330	347.5	T11	29.0
US2-600	12	630	600	300	175	330	350	T11	35.7
US2-800	12	840	800	410	175	330	350	T11	50.4
US2-1000	12	1050	1000	475	175	328	350	T11	59.0
US2-1200	12	1260	1200	475	175	328	350	T11	66.4
US2-1500	12	1576	1500	403	354	339	349	T11	96.0
US2-2000	12	2100	2000	490	350	339	349	T11	120.5
US2-2500	12	2626	2500	490	350	339	349	T11	133.6
US2-3000	12	3150	3000	709	350	337	347	T11	180.0



UCP SERIES

Features

- Valve Regulated Lead Acid (VRLA) Battery,maintenance free.High power discharge.
- High Compact Density Plate, robust, high accuracy.
- 3D structure: optimized design for pasting and active material adherence.Thin grid and plate offers more surface area for high power delivery.
- Automatic production process, strong productivity, fast, high quality consistency.
- Thin plate, more plates with special formula, gives good HRPSoC performance.
- Lower calcium level of Pb alloy, longer floating life.
- Lower self discharging rate, longer shelf life.
- Heat sealing with special container material give a strong and robust product.
- No restrictions for rail, road, sea & air transport -complies with IATA/ICAO Special Provisions A67.
- Design according with IEC 60896-21/22:2004, JIS C 8702, JIS C 8704, etc.



Battery Constructure

- ① Negative Grid

② Negative Plate

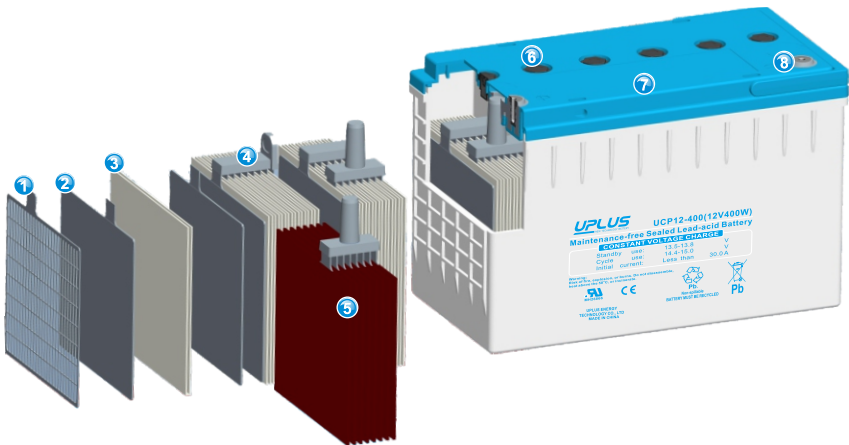
③ AGM Separator

④ Connector
- ⑤ Positive Plate

⑥ Safe Vent Valve

⑦ Container Cover

⑧ Negative Terminal Post



Specifications

Model	Rated Voltage(V)	Capacity C ₁₀ (AH)	Power 15min(W)	Dimension/mm				Terminal	Weight/Kg
				Length	Width	Height	Total Height		
				mm	mm	mm	mm		
UCP12-24	12	6.5	24	151	65	93.5	99	T2	2.02
UCP12-26	12	7	26	151	65	93.5	99	T2	2.15
UCP12-30	12	7	30	151	65	93.5	99	T2	2.24
UCP12-34	12	7.5	34	151	65	93.5	99	T2	2.35
UCP12-38	12	7.5	38	151	65	93.5	99	T2	2.50
UCP12-80	12	18	81	181.5	77	166.5	166.5	T12	5.80
UCP12-90	12	20	90	181.5	77	166.5	166.5	T12	6.35
UCP12-135	12	38	135	197	165	170	170	M6	11.4
UCP12-225	12	65	225	348	167	178	178	M6	19.2
UCP12-300	12	80	300	260	168	208	214	M6	24.2
UCP12-350	12	90	350	306	168	207	214	M6	27.8
UCP12-400	12	100	400	330	173	213	216	T11	30.2
UCP12-450	12	100	450	330	173	213	216	T11	31.2
UCP12-740	12	220	740	522	240	218	224	T11	64.0
UCP12-810	12	250	810	522	268	220	226	T11	73.0



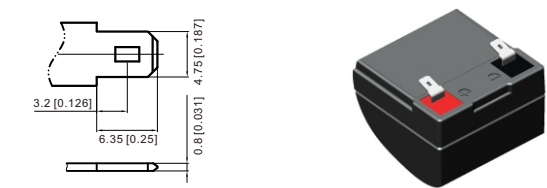
Application

- UPS (High rate)
- Emergency power supply
- Banks & Financial Markets
- Hospitals & Testing Laboratories
- Industrial Process Control Facilities
- Date & Network Operations Centers

UPS Battery Terminal Dimensions&Terminal Options

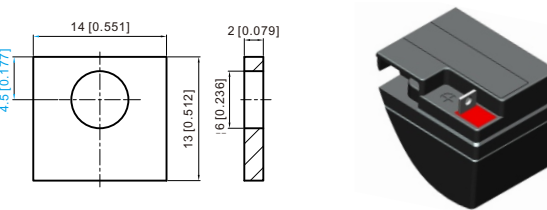
T1 Terminal

FASTON TYPE (Copper) quick disconnect tabs; silver coating for better conductivity



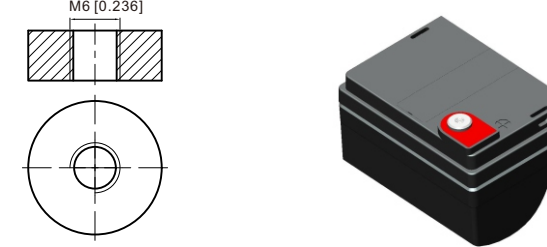
T3 Terminal

Brass Coated With Tin
Torque: 3.9 ~ 5.4 N*m



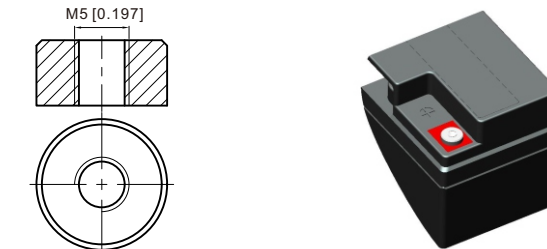
T6 Terminal

Brass Coated With Tin; Threaded Insert 6mm STUD
Torque: 3.9 ~ 5.4 N*m



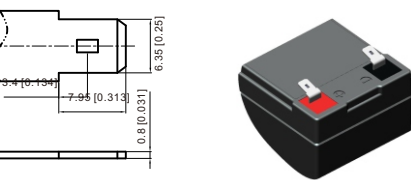
T12 Terminal

Brass Coated With Tin; Threaded Insert 5mm STUD
Torque: 2.0 ~ 3.0 N*m



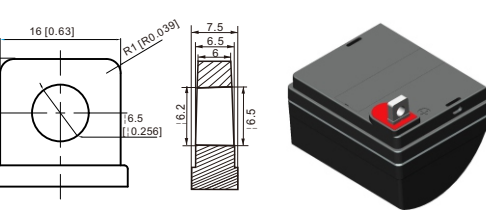
T2 Terminal

FASTON TYPE (Copper) quick disconnect tabs; silver coating for better conductivity



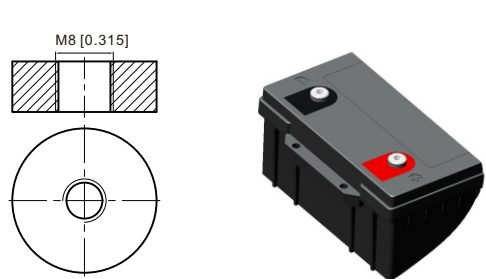
T5 Terminal

Lead
Torque: 3.9 ~ 5.4 N*m



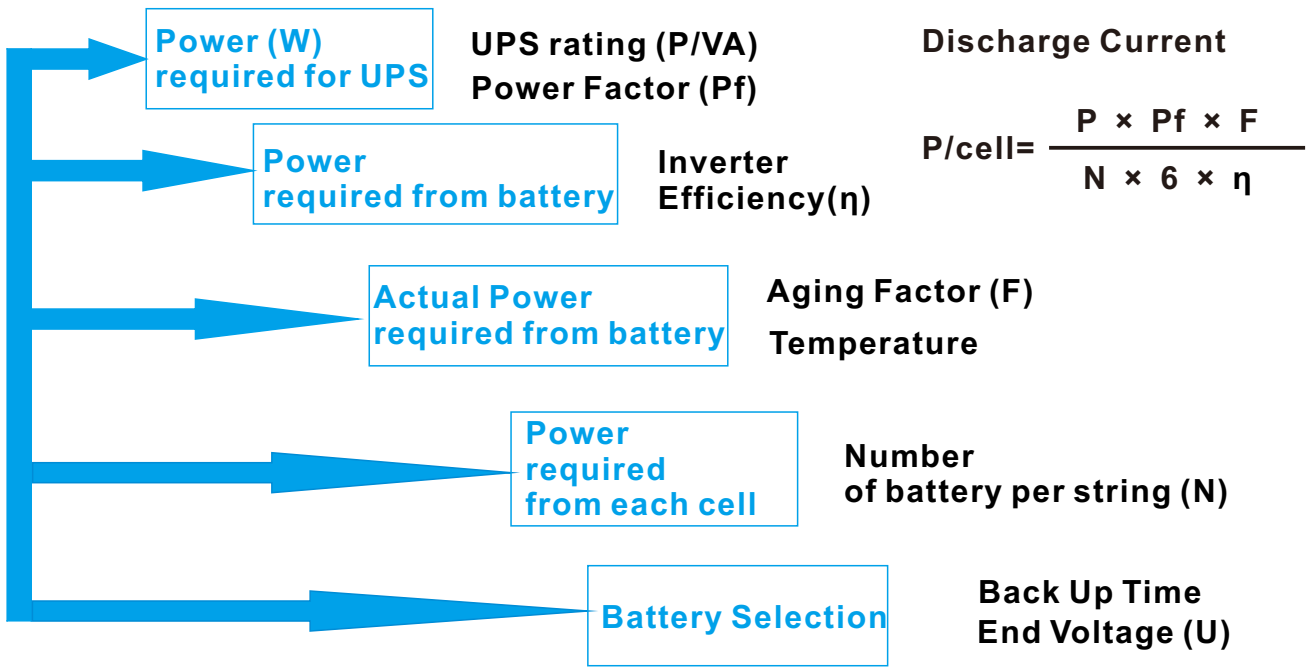
T11 Terminal

Brass Coated With Tin; Threaded Insert 8mm STUD
Torque: 11~14.7 N*m



Note: the figures below just show the appearance and dimension. For the positioning on each battery model, please check the specification

UPS Configuration



Product Description

Construction	
Positive Plate	Lead-calcium grids minimize corrosion & prolongs life
Negative Plate	Balanced lead-calcium grids optimize recombination efficiency
AGM Separator	Mechanically strong, low electrical resistance, micro porous glass fiber which completely absorbs the electrolyte into its structure
Terminal Post	Lead casting terminal or threaded copper insert alternative (some models), the copper one provides better conductivity.
Venting Valve	EPDM Rubber 10~49KPa release pressure. Resealing at 3~15KPa.
Container / Cover / Lid	ABS (UL-94 HB, UL-94 V0 optional)
Operation temperature range	
Nominal	20°C~25°C (68~77°F)
Discharge	-15°C ~ +50°C (5~122°F)
Charge	0°C ~ 40°C(32~104°F)
Storage	-15°C ~ +40°C (5~104°F)
Performance	
Recommended Maximum Charging Current Limit	Less than 0.3CA
Float Charging Voltage	13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
Maximum AC Ripple (Charger)	0.02V/cell
Self-Discharge	Low self-discharge rate less than 3% / month @20°C
Equalize charge & cycle service life voltage	13.8~14.4V for equalize charge and 14.4~15.0V for cycle charge voltage @25°C

Note: Design and/or specifications subject to change without notice. If questions arise, contact your local Leoch sales representative for clarification.

HIGH RATE/UPS BATTERY