FANSO

Terminals for single cells(can be customized)

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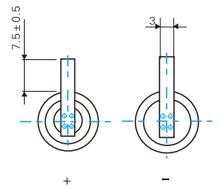

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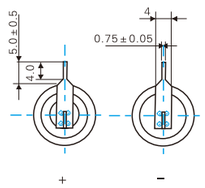

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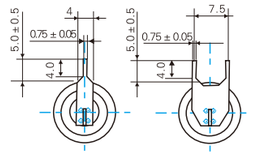

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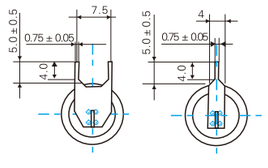

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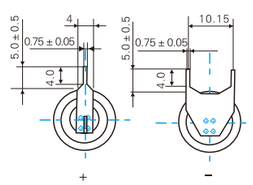

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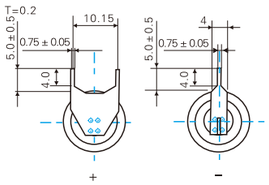

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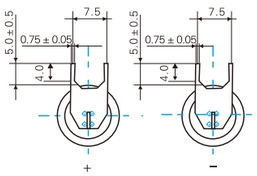

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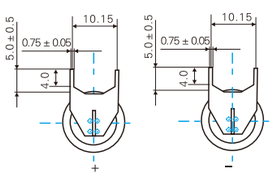

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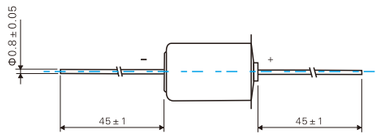

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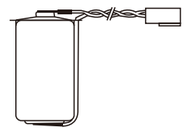
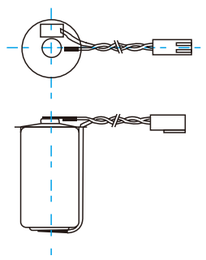


Connector Type1



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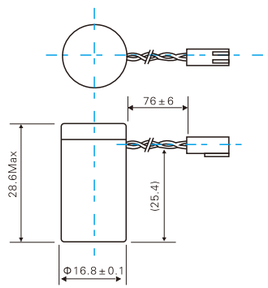

Case Type

WUHAN FANSO TECHNOLOGY CO., LTD

Address:No.1 Sitai Industrial Park,Yongfeng Avenue, Hanyang District, Wuhan city, China Pc：430051

Tel：86–27–84452919，84458099 Fax：86–27–84453116 Http://www.fansobattery.com Email: overseas@fansobattery.com

FANSO

Primary Lithium Battery

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Primary Lithium Battery

Same life as the electronic devices

- FANSO primary lithium batteries are widely applied in different applications such as industry, military and household , can meet the variable and developed requirements of the global customers.
- FANSO is constantly dedicated in the research and innovative and keeps our products have the world-class technology and quality.
- FANSO can offer excellent products, price and service.

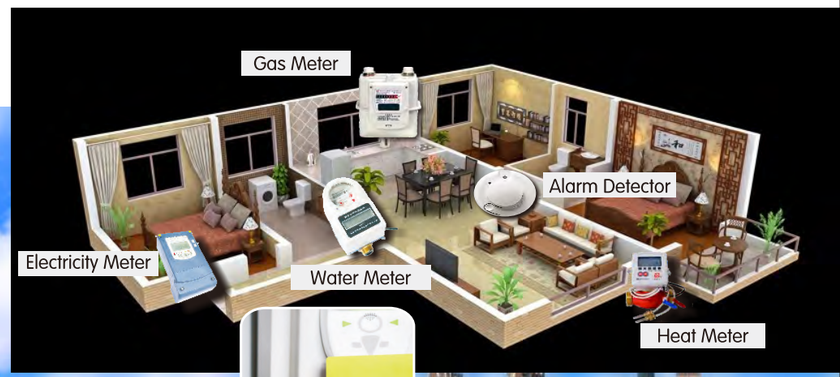
Brief Introduction

Wuhan Fanso Technology Co., ltd. was established in 2002 by Mr Dai Jianghua ,one of the initiators of primary lithium battery in China. FANSO is the professional manufacturer of lithium battery with senior experts and technicians engaged in the research of primary lithium battery field for over 30 years. We have massive storage and usage data in ensuring permanent operating life and play an important role in the products update and technical promotion.

FANSO main products are 3.6v Li-$SOCL_2$ battery and 3.0v Li-MnO_2 battery. We have 16 advanced production lines with an annual production capability of 80 million pieces.

Our products are mainly applied to the civil fields such as utility meters, GPS tracking, intelligent instruments, RFID, TPMS, RAM and CMOS circuits,electronic pressure gauges,oil fields down hole drilling (LWD and MWD), and national defense & military fields such as aerospace, underwater weapons, sonar, navigation and radio stations. FANSO achieved the certification of ISO9001 and most products passed the UL, CE,ROHS and UN, etc.

FANSO insists on the quality policy of " seeking for greater perfection, constantly bringing forth new ideas, service with complete sincerity and customer full satisfaction". Choose FANSO is the best choice.



Li-SOCl$_2$ Battery
- High Capacity

Key features ● Long shelf life(Self-discharge rate less than 1% at 25 ℃) ● High energy density (700wh/kg) ● Long operating life ● Stainless steel container and end caps ● Wide temperature range ● Hermetic glass-to-metal sealing ● Non-flammable electrolyte ● Compliant with IEC86-4 safety standard ● Non-restricted for transport ● High and stable operating voltage

Main Applications ● Utility metering ● Alarm and security devices ● Memory back-up power ● Professional electronics ● Real-time clock ● Tracking system ● Military system ● Automotive electronics

Storage

The storage area should be clean, cool (preferably below +20℃ , not exceeding +30℃), dry and ventilated.

Model	Size	Max Dimensions (ϕmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
ER14250H	1/2AA	ϕ14.5X25.2	9	3.6	1200\1.0	20	-55~+85	2.0
ER14335	2/3AA	ϕ14.5X33.5	13	3.6	1650\1.0	40	-55~+85	2.0
ER14505H	AA	ϕ14.5X50.5	18	3.6	2600\1.0	50	-55~+85	2.0
ER17335	2/3A	ϕ17.0X33.5	18	3.6	1900\1.0	50	-55~+85	2.0
ER17505	A	ϕ17.0X50.5	24	3.6	3600\2.0	70	-55~+85	2.0
ER18505H	——	ϕ18.5X50.5	30	3.6	4000\2.0	70	-55~+85	2.0
ER26500H	C	ϕ26.2X50.0	53	3.6	8500\2.0	100	-55~+85	2.0
ER261020H	CC	ϕ26.2X102.0	101	3.6	16000\2.0	150	-55~+85	2.0
ER34615H	D	ϕ34.2X61.5	103	3.6	19000\2.0	150	-55~+85	2.0
ER341245H	DD	ϕ34.2X124.5	200	3.6	36000\10	300	-55~+85	2.0

Warning: Do not recharge, over discharge, short circuit, crush, disassemble , heat above 100℃ , incinerate , or expose contents to water. Dispose of used batteries properly in case of explosion, burn and leakage.

Li-SOCl$_2$ Battery
- High Power

Key features ● Long shelf life(Self-discharge rate less than 1% at 25 ℃) ● High energy density (700wh/kg) ● Long operating life ● Stainless steel container and end caps ● Wide temperature range ● Hermetic glass-to-metal sealing ● Non-flammable electrolyte ● Compliant with IEC86-4 safety standard ● Non-restricted for transport ● High and stable operating voltage

Main applications: ● Active RFID tags ● Alarm and security systems ● Smoke detectors ● Memory back-up power ● Medical ● Real-time clock ● Professional electronics

Storage

The storage area should be clean, cool (preferably below +20℃ , not exceeding +30℃), dry and ventilated.

Model	Size	Max Dimensions (ϕmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
ER14250M	1/2AA	ϕ14.5X25.2	10	3.6	750\1.0	100	-55~+80	2.0
ER14335M	2/3AA	ϕ14.5X33.5	13	3.6	1350\2.0	150	-55~+80	2.0
ER14505M	AA	ϕ14.5X50.5	19	3.6	2100\3.0	300	-55~+80	2.0
ER17335M	2/3A	ϕ17.0X33.5	19	3.6	1700\3.0	200	-55~+80	2.0
ER17505M	A	ϕ17.0X50.5	26	3.6	2800\5.0	400	-55~+80	2.0
ER18505M	——	ϕ18.5X50.5	30	3.6	3500\5.0	500	-55~+80	2.0
ER26500M	C	ϕ26.2X50.0	57	3.6	6000\10	1000	-55~+80	2.0
ER34615M	D	ϕ34.2X61.5	109	3.6	13000\15	1800	-55~+80	2.0

Warning: Do not recharge, over discharge, short circuit, crush, disassemble , heat above 100℃ , incinerate , or expose contents to water. Dispose of used batteries properly in case of explosion, burn and leakage.

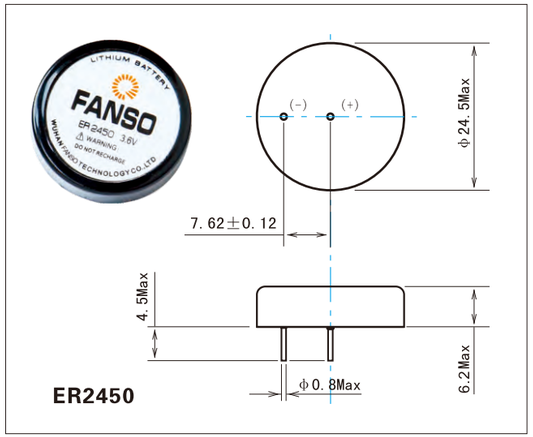
Li-$SOCl_2$ Battery—Coin Types

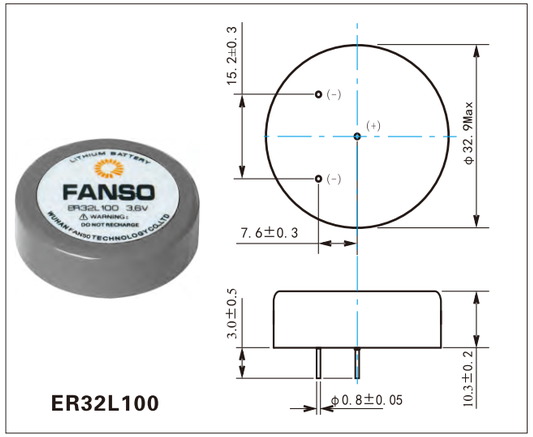
(Operating Temperature: –55℃~+125℃)

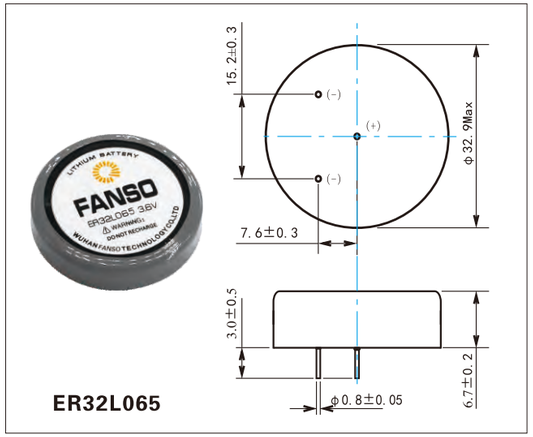
Key features ● Non–restricted for transport ● Long operating life
● Long shelf life (Self–discharge rate less than 1% at 25 ℃)
● Compliant with IEC86–4 safety standard
● Stainless steel container and end caps
● Non–flammable electrolyte ● Wide temperature range
● High and stable operating voltage
● High energy density (700wh/kg)
● Hermetic glass–to–metal sealing

Main Applications

● Utility metering ● Alarm and security devices
● Memory back–up power ● Professional electronics
● Automotive electronics ● Real–time clock ● Tracking system







Model	Size	Max Dimensions (φmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
Button cells								
ER2450	––	φ24.5×6.2	9	3.6	500 \ 0.5	8	–55~+125	2.0
ER32L065	1/10D	φ32.9×6.9	17	3.6	1000 \ 1.0	20	–55~+125	2.0
ER32L100	1/6D	φ32.9×10.5	24	3.6	1700 \ 1.0	30	–55~+125	2.0

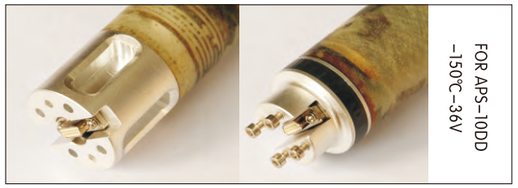
Li-$SOCl_2$ Battery - High Temperature

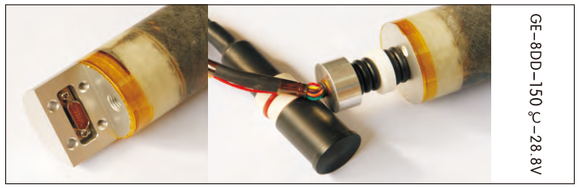
FANSO high temperature batteries can operate well in ultra–temperature environment. Discharging platform and capability reach or approach the world's highest level. Equipped with a team of industry specialists

Mainly applied for: downhole storage apparatus, electronic pressure gauge, flow meter, and MWD/LWD/FEWDQ (e.g. APS, GE, HL) in oil field; TPMS; geothermal meter; aerospace, sonar, navigation and radio station for military use.

Model	Size	Max. Dimensions (φmmxHmm)	Nominal Voltage (V)	Nominal Capacity (mAh)	Max. Continuous Discharge Current (mA)	Max. Pulse Current (mA)	Operating Temperature (℃)
ER14250S	1/2AA	14.65X25.2	3.6	700 \ 10	10	50	–20~150
ER14505S	AA	14.65X50.5	3.6	1800 \ 20	50	100	–20~150
ER25500S	C	24.8X50.0	3.6	5000 \ 50	50	100	–20~150
ER251020S	CC	24.8X102.0	3.6	14000 \ 100	100	200	–20~150
ER34615S	D	33.5X61.5	3.6	14000 \ 100	100	200	–20~150
ER341245S	DD	33.5X124.5	3.6	30000 \ 200	100	300	–20~150
There is no specification of high/moderate/low rate battery here. If more infomation needed, please feel free to contact us.							

High Temperature
Li–$SOCl_2$ Battery Packs





Li-MnO_2 Battery - Cylindrical Shape

Key features: ● High and stable operating voltage ● Low self-discharge rate (less than 2% at 20 ℃) ● Hermetic glass-to-metal sealing ● Compliant with IEC86-4 safety standard ● Nickel-clad steel container ● Non-restricted for transport

Main applications: ● Alarm and security devices ● Smoke detector ● Memory back-up power ● Real-time clock ● Professional electronics ● Medical

Storage: The storage area should be clean, cool(preferably below +20℃, not exceeding +30℃), dry and ventilated.

Model	Size	Max Dimensions (ϕmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
CR14250E	1/2AA	14.5X25.2	8.5	3	650\5	250	-40~+70	2.0
CR14505E	AA	14.5X50.5	17	3	1400\5	1000	-40~+70	2.0
CR17335E	2/3A	17.0X33.5	17	3	1500\5	1000	-40~+70	2.0
CR17450E	AG	17.0X45.0	26	3	2200\10	1000	-40~+70	2.0
CR17505E	A	17.0X50.5	30	3	2400\10	1000	-40~+70	2.0
CR26500E	C	26.2X50.5	55	3	5000\10	1000	-40~+70	2.0
CR34615E	D	34.0X61.5	125	3	12000\10	2000	-40~+70	2.0

Model	Size	Max Dimensions (ϕmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
CR14250H	1/2AA	14.5X25.2	12	3	950	7	-40~+70	2.0
CR14250B	1/2AA	14.5X25.2	12	3	800	7	-40~+70	2.0

Li-MnO_2 123A Batteries

Model	Size	Max Dimensions (ϕmmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
CR2		15.5X27.0	13	3	850\5	800	-40~+70	2.0
CR-P2		35X19.5X36	42	6	1500\5	1000	-40~+70	4.0
CR123A		17.0X34.5	16	3	1500\5	1000	-40~+70	2.0
2CR5		34X17X45	39	6	1500\5	1000	-40~+70	4.0

Warning: Do not recharge, over discharge, short circuit, crush, disassemble , heat above 100℃, incinerate , or expose contents to water. Dispose of used batteries properly in case of explosion, burn and leakage.

Li-MnO_2 Battery - Soft pack

Key features: ● High and stable operating voltage ● Low self-discharge rate (less than 2% at 20 ℃) ● Non-restricted for transport ● Hermetic glass-to-metal sealing ● Compliant with IEC86-4 safety standard

Main applications: ● Active RFID tags ● Alarm and security systems ● Smoke detectors ● Memory back-up power ● Medical ● Real time clock ● Professional electronics

Model	Max Dimensions (ϕmmXmm) (L) X (W) X (T)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
CP223830	30×39×2.2	4	3	350	80	-40~+60	1.8
CP224147	48.3×45.5×2.2	6.5	3	800	200	-40~+60	1.8
CP224348	48×43×2.2	6	3	750	200	-40~+60	1.8
CP305050	51×56.5×3.2	14	3	1600	600	-40~+60	1.8
CP353030	28.5×29×3.5	3	3	350	100	-40~+60	1.8
CP382025	20.5×25×4	3.5	3	350	80	-40~+60	1.8
CP383047	47.5×31×4	9.5	3	1350	400	-40~+60	1.8
CP404147	41×48×4	14	3	1800	600	-40~+60	1.8
CP405050	51×51×4.4	18	3	2400	800	-40~+60	1.8
CP502025	26×20.5×5.2	4	3	450	120	-40~+60	1.8
CP502425	26×24.5×5.2	5.5	3	550	150	-40~+60	1.8
CP502440	41×24.5×5.2	7.5	3	1200	300	-40~+60	1.8
CP502627	26×27×5.2	6.5	3	750	150	-40~+60	1.8
CP503448	35×49×5.2	15	3	2000	600	-40~+60	1.8
CP603448	35×49×6.2	18	3	2300	1000	-40~+60	1.8
CP702440	24.5×50.5×7	11	3	1500	500	-40~+60	1.8
CP754560	60.5×45×7.7	37	3	5000	1500	-40~+60	1.8
CP802432	32.5×24.5×8.2	9	3	1300	400	-40~+60	1.8
CP803665	66×36.5×8.2	38	3	5000	1500	-40~+60	1.8
CP904560	60×45×9.2	43	3	6200	1500	-40~+60	1.8
CP1003550	35.5×49×10.5	33	3	4200	1500	-40~+60	1.8
CP1003742	38×42×10.8	30	3	3800	2000	-40~+60	1.8
CP1004560	47×60×10.2	47	3	7200	2000	-40~+60	1.8
CP1202425	25.5×26×12	7.5	3	1100	300	-40~+60	1.8

Lithium Battery 9V

Key features ● Wide temperature range ● Hermetic glass-to-metal sealing ● Low self-discharge rate less than 1% at 25 ℃
● High and stable operating voltage ● Stainless steel container and end caps ● Non-flammable electrolyte ● High energy density
● Compliant with IEC86-4 safety standard ● Long operating life

Main Applications ● Utility metering ● Real-time clock ● Smoke detector ● Professional electronics
● Memory back-up power ● Alarm and security devices

ER9V 1200mAh

- Nominal capacity 1200mAh
  (at 1mA, +25℃ ,6.0V cut-off)
- Nominal voltage 10.8V
- Max continuous current 15mA
  (at+25℃ 6.0V cut-off, up to 50% of nominal capacity)
- Max. pulse current ..... 40 mA
  100mA/0.1s pulses, drained every 2 minutes at 25℃ from 1mA mid-discharged cells with 20μA base current, yield voltage readings above 6V.The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history.
- Operating temperature range ..... -55℃~+85℃
- Weight ..... Approx. 31g

Model	Max Dimensions (ϕ mmXmm)	Weight (g)	Nominal Voltage (V)	Nominal Capacity\ Current (mAh\mA)	Max Continuous Discharge Current (mA)	Operating Temperature (℃)	End Voltage (V)
ER9V	49.1X26.8X17.4	31	10.8	1200/1.0	15	-55~+85	6.0V
CP9V	49.5X27.5X18.0	29	9	1200/1.0	120	-40~+60	5.4V
CP9V	48.5x25.7X17.0	28	9	800/1.0	100	-40~+60	5.4V

CP9V 800mAh

Key features: ● High and stable operating voltage ● Low self-discharge rate less than 2% at 20 ℃
● Compliant with IEC86-4 safety standard

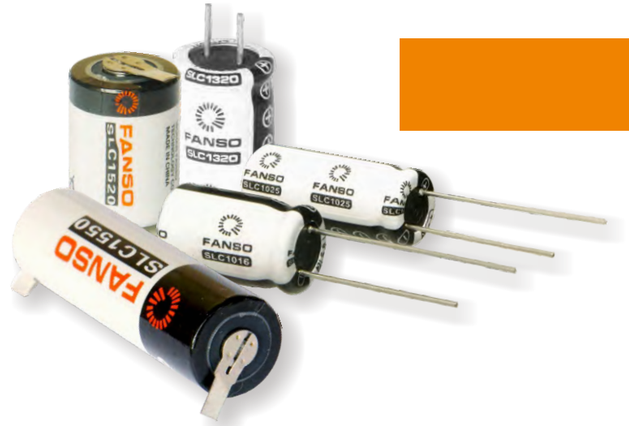
Main applications ● Utility metering ● Alarm and security devices
● Professional electronics ● Real-time clock ● Memory back-up power ● Smoke detectors

- Nominal capacity ..... 800 mAh
  (at1.0mA +25℃ 5.4V cut-off)
- Nominal voltage 9.0V
- Max continuous current 100mA
  (At +25℃ 5.4V cut-off, up to 50% of nominal capacity)
- Max pulse current 300mA
  15 second pulses to 5.4V cut-off ,
  (drained from half-discharged cells at 1mA 25℃)
- Operating temperature range ..... -40℃~+60℃
- Weight ..... Approx. 28g

CP9V 1200mAh

- Nominal capacity 1200mAh
  (at1.0mA +25℃ 5.4V cut-off)
- Nominal voltage 9.0V
- Max continuous current 120mA
  (At +25℃ 5.4V cut-off, up to 50% of nominal capacity)
- Max pulse current 400mA
  15 second pulses to 5.4V cut-off ,
  (drained from half-discharged cells at 1mA 25℃)
- Operating temperature range ..... -40℃~+60℃
- Weight ..... Approx. 29g

Li-ion Capacitor



FANSO Super Lithium-ion capacitor (SLC) can deliver high pulse and work at a wide temperature range from -40℃ to 85℃. Combination consists of long life Li-socl2 battery and Li-ion capacitor in parallel connection, which is an ideal power source for intelligent meters and other applications requiring high pulse current.

Key features ● Low self-discharge rate ● Excellent performance at high and low temperature ● Excellent high pulse capability
● Minimized passivation effect ● Utilized electric characteristics from both ER batteries and SLC ● High safety and reliability
● Long operating life

Main Applications ● Data collection and recording ● Emergency rescue system ● GPS tracking system
● Radio frequency identification (RFID) ● Remote wireless transmission system ● Communication device
● Intelligent transportation

Model	Max. Charging Voltage/V	Max.Capacity (3.65V) /mAH	Max. Discharge current/mA		End Voltage (V)	ESR /mΩ
			Constant	Pulse		
SLC1016	3.95	12	300	500	3.0	250
SLC1025	3.95	40	1000	2000	3.0	100
SLC1320	3.95	25	2000	3000	3.0	400
SLC1520	3.95	45	500	2000	3.0	150
SLC1550	3.95	170	2000	5000	3.0	100

Model	Dimensions			
	D/mm	p/mm	L/mm	d/mm
SLC1016	10.0±0.5	5.0±0.5	16.0±0.2	0.6±0.05
SLC1025	10.0±0.5	5.0±0.5	25.0±0.2	0.6±0.05
SLC1320	13.1±0.2	5.3±0.5	20.5±0.5	0.8±0.05
SLC1520	15.1±0.1		21.0±0.1	
SLC1550	15.1±0.1		51.0±0.1	