## 

# THE FUTURE OF LITHIUM ION BATTERIES & CHARGERS

www.shido-batteries.com



## THE HEART OF **YOUR MOTORCYCLE**

Lithium Ion batteries are the life force of your engine.

SHIDO LiFePO4 Batteries offer 60% higher start capacity and weigh less than half a conventional Lead-acid battery. With their high reliability and quick charging properties, SHIDO LiFePO4 batteries are the ultimate bike starters, even in the toughest conditions.

SHIDO has the largest selection of aftermarket Lithium batteries, and combine Japanese quality with the latest battery technology.

SHIDO Smart Chargers for Lithium and Lead-acid are developed in conjunction with our battery products. Using SHIDO chargers guarantees ease of use and a maximum battery life.





### LITHIUM ION **BATTERY**

SHIDO Lithium batteries have 4 cells LiFePO4 (Lithium Iron Phosphate) of 3.2 volts connected in series in order to reach an OCV of 12.8 volts. A perfect voltage to use as a starter battery for motorcycles. The electronic Battery Management System or BMS spread the charge and discharge regularly over the four cells. Thanks to its low internal resistance a SHIDO Lithium battery can generate a very high starting current with a small capacity. This starting power delivers a powerful and quick start of the vehicle.



### **ADVANTAGES**

### OF A SHIDO BATTERY

- ► Superb cranking capacity.
- ► Up to **75% lighter** than Lead-acid batteries.
- ► Long capacity retention.
- Lower self discharge: Longer shelf life.
- ► Excellent **cycle life**: more than 1200 cycles.
- ► More economical.
- ► Drop-in replacement.

- Less fuel consumption.
- ► Super-fast recharge.
- ▶ Safe in use.
- ► No maintenance.
- ► Stable discharge voltage.
- No pollution, no lead and no acid.
- Capacity indicator.
- ► IP68 waterproof.

**COMPATIBLE**CHARGERS

► DC 1.0.

**▶** DC 4.0.

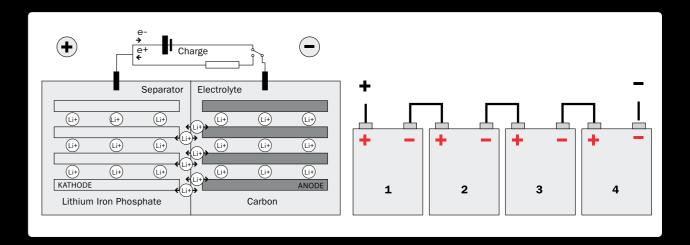






### HOW DOES IT WORK LITHIUM ION BATTERIES

4 cells LiFePO4 (Lithium Ferro Phosphate) 3.2 Volt in series - OCV is 12.8 volts.



### **MOUNTING ANGLE**



Because there are no liquids in the SHIDO batteries, any direction installation is permitted, including upside down.

### WEIGHT

SHIDO Lithium batteries are on average 3 to 4 times lighter than Lead-acid batteries.

LEAD-ACID BATTERY		SHIDO BATTER)	DIFFERENCE		
LEAD-ACID B	ATTERY	SHIDO BATTER		DIFFERENCE	
ITEM	Kg	ITEM	Kg	Kg	
NB4L-B	1,5	LTX4L-BS LION -S-	0,4	-1,1	
NTX7A-BS	2,6	LTX7A-BS LION -S-	0,6	-2,0	
NTZ10S	3,2	LTZ10S LION -S-	0,9	-2,3	
NB9-B	3,1	LB9-B Q LION -S-	0,6	-2,5	
NTX14-BS	4,6	LTX14-BS LION -S-	1,1	-3,5	
NTX20-BS	6,7	LTX20L-BS Q LION	1,4	-5,3	

### **DIMENSIONS**

SHIDO Lithium batteries have exactly the same dimensions as the original Lead-acid battery and can be connected easily via universal terminals. Some batteries are provided with spacers to approximate the dimensions of the Lead-acid battery.

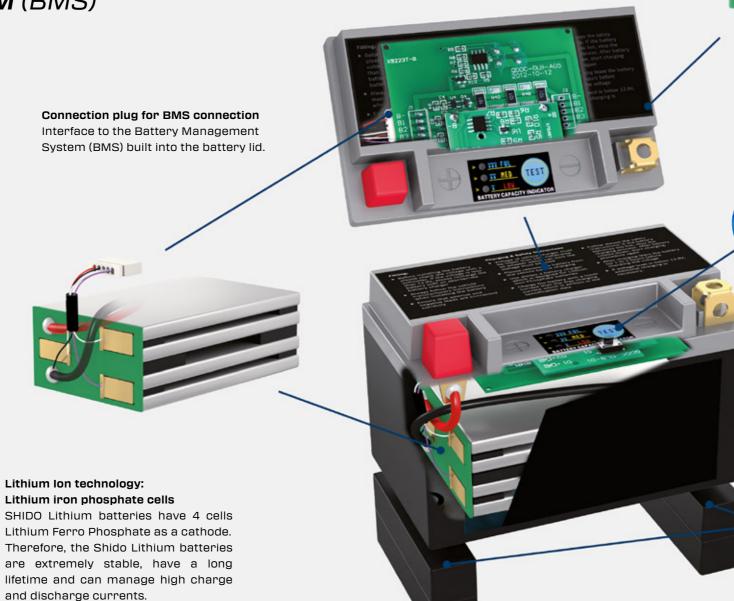




## LITHIUM ION TECHNOLOGY (LITHIUM IRON PHOSPHATE CELLS) WITH BATTERY MANAGEMENT SYSTEM (BMS)

Due to the low weight of the lithium-iron-phosphate cells, the M Li-ion battery is extremely light. With 4 x 3.2 V and 12.8 V and at least 1,500 cycles it

is particularly powerful and deep-cycle resistant. In addition, the M Li-ion can easily and quickly be recharged.



### Battery lid with voltage tester and Battery Management System (BMS)

balances the voltage level among the cells when charging or discharging.

Divided voltage and current evenly over the 4 cells to provide a uniform charge and discharge. The delivered stable capacity improves the performance and extends the life of the battery.

### Charge-status display and recommendations for the first application

Please check the charge status of the battery prior to the first application - even if the charge-status display (push blue button) shows full capacity (thee points). To ensure optimum service life, the battery should be fully charged by a microprocessor-controlled battery charger (e.g. SHIDO DC) prior to its first use.

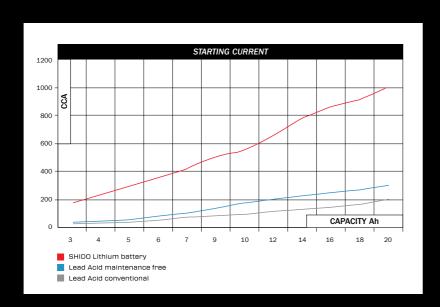
ensure a perfect position of the battery.



### HIGHER

### STARTING POWER

The starter needs sufficient starting current (CCA) to start. Depending on the necessary starting current a Lead-acid battery requires a higher capacity to be able to generate this current. SHIDO Lithium batteries generate a similar or greater starting power than a comparable Lead-acid battery with a smaller battery capacity. This is because the internal resistance of a Lithium battery is about three times less than a Lead-acid battery. As a result, the maximum discharge current is 3 times higher than for a Lead-acid battery. higher starting current guarantees a smoother start.

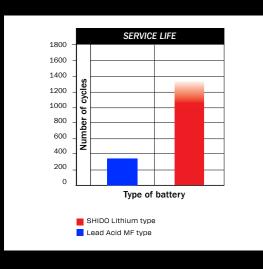


LEAD-ACID BATTERY								
TYPE	CAPACITY	STARTING CAPACITY						
	Ah	CCA						
NB4L-B	4	56						
NTX7A-BS	6	105						
NTZ10S	8,6	190						
NB9-B	9	130						
NTX14-BS	12	200						

SHID	DIFFERENCE		
TYPE	CAPACITY STARTING CAPACITY		
	Ah	CCA	CCA %
LTX4L-BS LION	1,6	95	+ 70 %
LTX7A-BS LION	2,4	150	+ 43 %
LTZ10S LION	4	240	+ 26 %
LB9-B Q LION	3	180	+ 38 %
LTX14-BS LION	4	240	+ 20 %

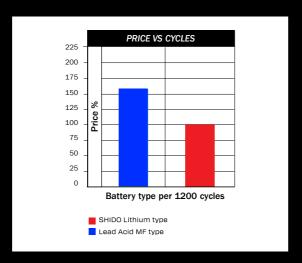
### I ONGER LIFE SPAN

The service life of a battery is determined by the number of charge and discharge cycles. This is approximately 350 cycles for Lead-acid batteries and about 1200 cycles for SHIDO Lithium (25% DOD or depth of discharge).



### MORE **ECONOMICAL**

Over its entire lifetime a Lithium battery shows to be economical, in average about 2/3 the price of a Lead-acid battery.

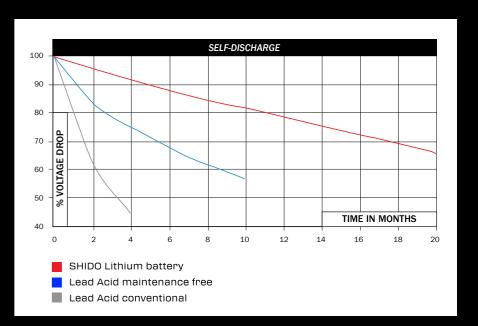


### LOW

### SELF-DISCHARGE

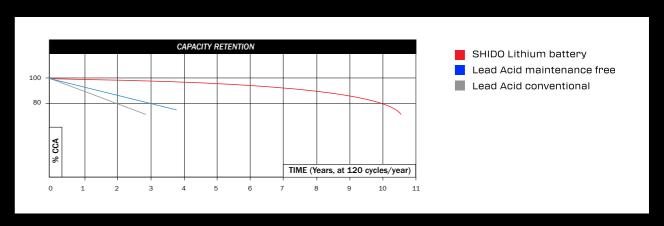
A Lead-acid battery loses voltage relatively quickly through self-discharge when the motorcycle is not in use. After a winter the battery doesn't have sufficient capacity left to rotate the starter.

This self-discharge is very low for a SHIDO Lithium battery. Even after 2 years of not using your motorcycle you still can start the engine. Note: Hidden power consumers such as alarm systems can discharge the battery much faster than only through the self-discharge.



### CAPACITY **RETENTION**

Typically, for a Lead-acid battery, the capacity decreases over time. A new Lead-acid battery has a higher starting power than a battery pack that is already several years old. The starting current of a SHIDO Lithium remains all his life at a high level which guarantees you a smooth start for a very long time. It is generally assumed that a battery must have at least 80% of its original capacity to be able to start the engine.



### **SAFETY**

A SHIDO Lithium battery is completely maintenancefree, the composition LiFePO4 cannot explode and does not contain substances which are hazardous to the environment. All SHIDO Lithium batteries are IP68 waterproof.

SHIDO Lithium batteries cannot leak and may be installed in any position, even upside down.





### OUR **RIDES**

Whether you're cruising on the highway or conquering rugged terrains, our Lithium lon batteries are your ideal companion. Engineered to fit a wide range of motorcycle models, you can trust in their compatibility with your ride.

Say goodbye to those frustrating engine struggles. Our Lithium Ion batteries deliver a powerful, consistent charge that ensures your engine fires up effortlessly, giving you the confidence to hit the road without hesitation.



## HIGH PERFORMANCE (HP) BATTERY

### HP HIGH PERFORMANCE

SHIDO High Performance (HP) Batteries offer up to 30% more cranking power than the same dimension battery of the standard Lithium ion range. This extra starting capacity delivers a powerful and quick start of the engine, ideal for high compression sports motorcycles and touring/adventure bikes with lots of electric accessories.

### IMPORTANT **FEATURES**

- ► **Higher** start capacity.
- ▶ Quicker (cold) starts.
- ► **Lighter** than Lead-acid batteries.
- ▶ Long shelf life.
- ► Quick recharge.
- ▶ Peace of mind: extra electric consumers on the motorcycle will not drain the battery quickly.

### COMPATIBLE

**▶** DC 1.0.

CHARGERS

▶ DC 4.0.



Up to 166% Higher Start Capacity2000+ Charging cycles65% Lighter than Lead-acid batteries6 Minutes charging capability

## LIGHTEST BATTERY WITH LOADS OF CRANKING POWER



### SHIDO HP **BATTERY DATA**

With the High Performance battery series, SHIDO wants to offer the most powerfull MC Lithium start batteries on the market. No other brand offers an equal capacity for the below dimensions.

SHIDO LION Item	LION Approx. Weight (KG)	LION Battery CA	HP Cap (Ah)	LION Energy (Wh)	Di	imensio	ns
					L	w	Н
LTZ10S HP LION -S-	1,1	360	6,0	72	150	87	93
LTZ7S HP LION -S-	0,62	180	4,0	48	113	69	105
LTX12 HP LION -S-	1,16	360	6,0	72	150	87	130
LTX14 HP LION -S-	1,18	360	6,0	72	150	87	145
LTX9 HP LION -S-	1,12	360	6,0	72	150	87	105
LT12B HP LION -S-	1,23	360	6,0	72	150	65	130
LTZ12S HP LION -S-	1,1	360	6,0	72	150	87	110
LTZ14S HP LION -S-	1,1	360	6,0	72	150	87	110
LTX20 Q HP LION -S	1,92	720	12,0	144	175	87	155
LTZ5S HP LION -S-	0,63	210	3	36	113	69	85

### TARGET **CUSTOMERS**

 $\square$  Customers who are looking for the lightest battery with the capacity of a Lead-acid battery, and the cranking power that exceeds OE lithium batteries specifications.

For example motorcycles that comes standard with a Lithium battery that get drained too easy because the motorcycle has extra consumers, like an alarm.

 $\square$  Customers with a sports bike looking for the lightest battery with loads of cranking power for instant starts.



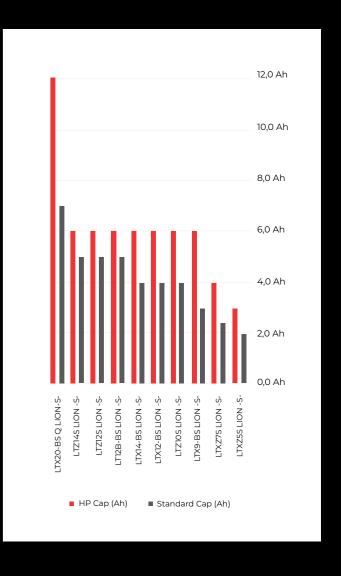
### SHIDO STRANDARD VS. SHIDO HP

A Lead-acid battery loses voltage relatively quickly through self-discharge when not using the motorcycle. After a winter the battery doesn't have sufficient capacity left to rotate the starter.

This self-discharge is very low for a SHIDO Lithium battery. Even after 2 year of not using your motorcycle you still can start the engine.

Note: Hidden power consumers such as alarm systems can discharge the battery much faster than only through the self-discharge.







## DUAL BATTERY CHARGERS

SHIDO dual battery chargers come with a unique and optimized algorithm, which enables quick and safe charging of both Lithium LiFePO4 and all types of Lead-acid batteries. SHIDO battery chargers are high quality and suited for all motorcycle and powersport applications.

### **ADVANTAGES**

OF SHIDO LITHIUM ION CHARGERS

- ► Clear distinction between Lithium and Lead-acid charging modes.
- ► Upgraded algorithm for both Lithium and Lead-acid battery charging.
- ► Battery Recovery mode for deeply discharged batteries.
- ► Battery health check after charging.
- Maintenance mode with 4 hour intervals voltage checks.

- Protected against reverse polarity, overcharging, overcurrent, overheating and short-circuiting.
- User friendly detection for reverse polarity, low-voltage or damaged batteries.
- ► IP 65, waterproof.
- ► Adjusts for varying A/C line voltage and delivers consistent charging current.



## FOR BOTH LITHIUM ION & LEAD-ACID BATTERIES

### DUAL BATTERY

### **CHARGERS**

These electronic battery chargers are designed to charge all types of lead batteries, conventional batteries and lithium LiFePO4 batteries of the latest generation. The numerous constructional technologies of currently available batteries require different charging curves to ensure correct and complete charging. These battery chargers extend the lives of your batteries because they charge each battery with the proper charge cycle.

### **ACCESSOIRIES**

### **INCLUDED**

DC 1.0. & DC 4.0.





DC 8.0.





DC 25.0.



BATTERY **COMPATIBILITY** 



Lead-acid

Lithium









DC 1.0.

DC 4.0.

DC 8.0.

DC 25.0.

Battery Compatibility	Lithium LiFeP04 & Lead-acid	Lithium LiFePO4 & Lead-acid	Lithium LiFePO4 & Lead-acid	Lithium LiFePO4 & Lead-acid
Power supply voltage	220 - 240V	220 - 240V	220 - 240V	220 - 240V
Frequency	50 - 60HZ	50 - 60Hz	50 - 60Hz	50 - 60Hz
Rated current (min-max)	IA	IA - 4A	2-8A	5 - I2,5 - 25A
Charging & testing stages	8	7	9	9
Battery voltage	12V	6V - I2V	12V	12V - 24V
Charge capacity	2 Ah - 40Ah	4Ah - 80Ah	5Ah - 160Ah	5Ah - 550Ah
Maintenance capacity	2Ah - 100Ah	4Ah - 120Ah	5Ah - 250Ah	5Ah - 800Ah
IP degree of protection	IP 65	IP 65	IP65	IP20
Size	180 x 80 x 40mm	210 x 87 x 50mm	230 x 100 x 65mm	260 x I30 x 75mm
Weight	0,4 Kg	0,6 Kg	l Kg	2,5 Kg
Digital screen	No	Yes	Yes	Yes

## 7 SHIDO MARINE

When it comes to marine applications, reliability is everything. SHIDO Marine batteries are designed to meet the unique demands of life on the water. Whether you're powering high-performance machines like jet skis or other personal watercraft, SHIDO delivers the powerful and dependable starting energy you need to get going smoothly, every time.



### **IP68 WATERPROOF**

A special sealing between cover & container prevents water seeping in.



### **NO POLLUTION**

- ▶ No lead, no acid on the water
- ► No liquids inside
- ► Only low impact materials
- ► High corrosion resistance



### **HIGHER START CAPACITY**

LEAD-ACID	SHID0	LEAD-ACID	SHID0
ITEM	ITEM	START CAPACITY	START CAPACITY
NTX20HL-BS-PW	LTX20L-BS Q LION	310 CCA	420 CCA
NB30CL-B	LIX30L-BS Q LION	385 CCA	540 CCA



VERY LOW SELF DISCHARGE



**75% LOWER WEIGHT** 



3 TIMES LONGER CYCLE LIFE



3X SHORTER CHARGING TIME



### SHIDO LITHIUM ION

### DATA SHEET

ltem \	V/olt	Capacity	CA	Energy	Dim	ensions (I	mm)	Weight		rging ent (A)	Lay-out 1	Terminal
item	Volt	Ah	А	Wh	L	w	Н	(Kg)	STD	MAX	Lay-out	Type
LEEL BLION C	40	4.6	OF	40	400	60	400	0.4	4			46
LB5L-B LION -S-	12	1,6	95	19	120	60	120	0,4	1	8	- +	16
LTX4L-BS LION -S-	12	1,6	95	20	113	70	85	0,57	1	8	- +	16
LTX5L-BS LION -S-	12	1,6	95	20	113	70	105	0,61	1	5	- +	18
LTM2L LION -S-	12	2	120	24	89	49	90	0,5	1	10	- +	18
LTM2 LION -S-	12	2	120	24	89	49	90	0,5	1	10	· -	16
LTZ5S LION -S-	12	2	120	24	113	69	85	0,61	1	10	- +	18
LTX7A-BS LION -S-	12	2,4	150	30	150	87	93	0,77	1,5	12	+ -	16
LTX7L-BS LION -S-	12	2,4	150	30	113	69	125	0,69	1,5	12	- +	18
LTZ7S LION -S-	12	2,4	150	30	113	69	105	0,62	1,5	12	- +	18
LB9-B Q LION -S-	12	3	180	36	134	75	134	0,7	1,5	12	: ;	16
LT7B-BS LION -S-	12	3	180	36	150	65	92	0,69	1,5	15	+ -	16
LT9B-BS LION -S-	12	3	180	36	150	65	106	0,74	1,5	15		16
LTX9-BS LION -S-	12	3	180	36	150	87	105	0,87	1,5	15	÷ -	18
LTZ5S HP LION -S-	12	3	210	36	113	69	85	0,65	1,5	15	- +	16
LTZ7S HP LION -S-	12	3	180	36	113	69	105	0,62	1,5	12	- +	16
LT12A-BS LION -S-	12	3,5	210	42	150	87	107	0,93	2	18	+ -	16
LB12AL-A2 Q LION -S-	12	4	240	48	130	75	160	0,9	2	20	- +	16
LTX12-BS LION -S-	12	4	240	48	150	87	130	0,99	2	18	+ -	18
LTX14-BS LION -S-	12	4	240	48	150	87	145	1	2	20	+ -	18
LTX14AHL-BS Q LI -S-	12	4	240	48	134	75	168	1,1	2	20	- + - +	16
LTX14L-BS LION -S-	12	4	240	48	135	75	145	1	2	20	- +	16
LTZ10S LION -S-	12	4	240	48	150	87	93	1	2	20	+ -	16
LTZ8V LION -S-	12	4,5	270	54	113	69	105	1	2,5	22,5	- +	16
LB16AL-A2 LION -S-	12	5	300	60	150	65	144	0,88	2,5	25	- +	16
LT12B-BS LION -S-	12	5	300	60	150	65	130	1,18	2,5	25	+ -	16

ltem	Volt	Capacity	CA	Energy	Dim	nensions (1	mm)	Weight		rging ent (A)	Lay-out	Terminal
icom	VOIC	Ah	А	Wh	L	w	н	(Kg)	STD	MAX	Lay out	Type
LT14B-BS LION -S-	12	5	300	60	150	65	144	1,19	2,5	25		18
LTZ12S LION -S-	12	5	300	60	150	87	110	1,12	2,5	25	+ -	16
LTZ14S LION -S-	12	5	300	60	150	87	110	1,12	2,5	25		16
LT12B HP LION -S-	12	6	360	72	150	65	130	1,23	2,5	25	+ -	16
LTPW16L LION -S-	12	6	360	72	175	100	175	1,4	3	24	_ +	18
LTX12 HP LION -S-	12	6	360	72	150	87	130	1	2	18		16
LTX14 HP LION -S-	12	6	360	72	150	87	145	1,18	2	20		16
LTX16-BS LION -S-	12	6	360	72	150	87	164	1,1	3	24	+ -	16
LTX20CH-BS LION -S-	12	6	360	72	150	87	164	1,3	3	24	+ -	16
LTX9 HP LION -S-	12	6	360	72	150	87	105	1,12	1,5	15	+ -	16
LTZ10S HP LION -S-	12	6	360	72	150	87	93	1,1	2	20		16
LTZ12S HP LION -S-	12	6	360	72	150	87	110	1,1	2,5	25		16
LTZ14S HP LION -S-	12	6	360	72	150	87	110	1,1	2,5	25		16
LTX20-BS Q LION -S-	12	7	420	84	175	87	155	1,7	3,5	28	: :	16
LTX24HL-BS Q LI -S-	12	7	420	84	175	87	163	1,6	3,5	28	: :	16
51913 LION -S-	12	7,5	420	90	180	76	170	1,65	4	28	- +	10
LIX30L-BS Q LION -S-	12	8	480	96	167	124	163	1,8	4	32	<u> </u>	17
LTX20 Q HP LION -S-	12	12	720	144	175	87	155	-	3,5	82	- +	16

### TERMINAL TYPE

10		
Front	Side	Тор

16			
Fro	ont	Side	Тор

17		
Front	Side	Тор
O		

18		
Front	Side	Тор
		00



### ALWAYS THE PERFECT FIT WITH SHIDO

### SHIDO BATTERY SPACERS

At SHIDO, we understand that a reliable battery is only part of the solution; ensuring the perfect fit is equally important. That's why our batteries come with additional spacers, guaranteeing a snug fit in any motorcycle's battery compartment.

#### **► UNIVERSAL FIT**

Our spacers allow the battery to fit securely in a wide range of models, ensuring compatibility across different vehicles.

### **► SIMPLE INSTALLATION**

Easily adjust the height and position of your battery without the need for special tools or modifications

#### **▶ ENHANCED STABILITY**

The spacers ensure a snug, vibration-free fit, which helps prolong the battery's lifespan and improves overall performance



	Replaced	Standalone Battery dimensions mm			Spacer configuration Method					
Item	Lead-Acid Battery Type		Photo with spacer	Spacer Size (mm) Thickness * W * L	Ler	ngth	Width		Height	
	Battery Type	(L * W * H)			FOAM NO.	QTY	FOAM NO.	QTY	FOAN NO.	QTY
	YTX4L-BS		C B		В	1	С	2	_	_
LTZ5S LION -S-	YTX5L-BS	107*55*85	1	A: 6PCS 7*55*106 B: 1PCS 7*55*127	В	1	С	2	А	3
	YTZ5S			C: 2PCS 7*127*114	В	1	С	2	-	-
LTZ7S LION -S-	YTZ6V -Y-	407*55*05	C B	A: 6PCS 7*55*106 B: 1PCS 7*55*127	В	1	С	2	А	3
	TTZ7S -Y-	107*55*85	A	C: 2PCS 7*127*114	В	1	С	2	А	3
LTX5L-BS LION -S-	YTX5L-BS -Y-	107*55*85	B B	A: 6PCS 7*55*106 B: 1PCS 7*55*127	В	1	С	2	А	3
	YTC5L-BS -Y-			C: 2PCS 7*127*114	В	1	С	2	А	3
	YTX4L -Y-	107*56*85 _	B	A: 6PCS 7*55*106	В	1	С	2	-	-
LTX4L-BS LION -S-	YTX4L-BS -Y-			B: 1PCS 7*55*127 C: 2PCS 7*127*114	В	1	С	2	А	3
	YB4L-A -Y- YB4L-B -Y-				A B	1 1	С	2	А	1
LT7B-BS LION -S-	YT7B -Y- YT7B-BS -Y-	150*65*92	A SANO TO	NO SPACER AND FOAM	-	-	-	-	-	-
LT9B-BS LION -S-	YT9B -Y- YT9B-BS -Y-	150*65*91	A HIDO	FOAM A: 4PCS 50*20*7	-	-	-	-	А	4
LT12B-BS LION -S-	YT12B -Y- YT12B-BS -Y-	150*65*130	THE REAL PROPERTY OF THE PARTY	NO SPACER AND FOAM	-	-	-	-	-	-
LT14B-BS LION -S-	YT14B -Y- YT14B-BS -Y	150*65*130	A MARINE	FOAM A: 4PCS 50*20*7	-	-	-	-	А	4

	Donload	Standalena	Spacer configuration Method							
Item	Replaced Lead-Acid Battery Type	Standalone Battery dimensions mm (L * W * H)	Photo with spacer	Spacer Size (mm) Thickness * W * L	Length		Width		Hei	ight
	Buttery Type				FOAM NO.	QTY	FOAM NO.	QTY	FOAM NO.	QTY
LTX9-BS LION -S	YTX9 -Y- YTX9-BS -Y-	150*87*105	A SWED	NO SPACER AND FOAM	-	-	-	-	-	-
LT12A-BS LION -S-	YT12A -Y- YT12A-BS -Y-	150*86*92	a teno	FOAM A: 4 PCS 50*20*7	-	-	-	-	А	4
LTX12-BS LION -S-	YTX12 -Y- YTX12-BS -Y-	150*87*105	A SHOO	FOAM A: 2 PCS 50*20*20	-	-	-	-	А	2
LTX14-BS LION -S-	YTX14H -Y- YTX14H-BS -Y- YTX14	150*87*143	# 5950	NO SPACER AND FOAM	-	-	-		-	-
LTX14L-BS LION -S-	YTX14L-BS -Y-	150*87*145	S HIDO	NO SPACER AND FOAM	-	-	-	-	-	-
LTX20CH-BS LION -S-	YTX20A-BS -Y- YTX20CH-BS -Y-"	150*86*105	A B C	SPACER A: 2PCS 85*20*11 B: 2PCS 85*20*17 C: 2PCS 85*20*25	-	-	-	-	A B C	2 2 2
LTZ10S LION -S-	YTZ10S -Y- TTZ10S-BS -Y-	150*87*92	7) 100 100 100 100 100 100 100 100 100 10	NO SPACER AND FOAM	-	-	-	-	-	-
LTZ14S LION -S-	YTZ14S -Y- TTZ14S-BS -Y-	150*87*92	A STATE OF THE PARTY OF THE PAR	SPACER A: 2PCS 85*20*17	-	-	-	-	А	2

	D. J.	Standalone				Spacer configuration Method					
Item	Replaced Lead-Acid Battery Type	Battery dimensions mm	Photo with spacer	Spacer Size (mm) Thickness * W * L	Length		Width			ight	
	Battery Type	(L * W * H)			FOAM NO.	QTY	FOAM NO.	QTY	FOAM NO.	QTY	
LB12AL-A2 Q LION -S-	YB12AL-A2 -Y- YB12AL-A -Y- YB12B-B2 -Y- YB12A-A -Y- YB12A-B -Y-	405*75*400	В	FOAM A: 6PCS 7*20*50	-	-	А	1	B A	2 2	
	YB10L-A2 -Y- YB10L-B -Y- YB10L-B2 -Y- YB10L-BP -Y-	135*75*133	P SHIDO	B: 2PCS 20*20*50	-	-	А	2	А	2	
LB9-B Q LION -S-	12N9-3A -Y- 12N9-3B -Y- 12N9-4B-1 -Y- YB9-B -Y- YB9-B WA -Y- YB9L-A2 -Y- YB9L-B -Y-	135*75*138	2 SHIDO	NO SPACER AND FOAM	-	-	-	-	-	-	
51913 LION -S-	YT19BL-BS -Y- 51814 -Y- 51913 -Y- YT19BL -Y-	181*76*171	A DINO	NO SPACER AND FOAM	-	-	-	-	-	-	
LTM2L LION -S-	-	107*55*85	, 1000 °	NO SPACER AND FOAM	-	-	-	-	-	-	
LTM2 LION -S-	-	107*55*85	w inner	NO SPACER AND FOAM		-	-	-			
LTX7L-BS LION -S-	YTX7L -Y- YTX7L-BS -Y-	107*55*85	C C C C C C C C C C C C C C C C C C C	FOAM A: 6PCS 7*55*106 B: 1PCS 7*55*127 C: 2PCS 7*127*114	В	1	С	2	А	6	
LB5L-B LION -S-	12N5-3B -Y- YB5L-B -Y- YB5L-B WA -Y- 12N5.5-3B -Y- 12N5.5-4A -Y- 12N5.5-4B -Y-	- 120*60*92	C B	SPACERS A: 2PCS 50*20*35	-		-	-	А	2	
		<b>55</b> 52	A		-	-	-	-	А	2	

	Replaced	Standalone Battery dimensions mm				Spacer	configuration Method				
Item	Lead-Acid Battery Type		Photo with spacer	Spacer Size (mm) Thickness * W * L	Length		Width			ght	
		(L * W * H)			FOAM NO.	QTY	FOAM NO.	QTY	FOAM NO.	QTY	
LB16AL-A2 LION	YB16AL-A2 -Y- YB16AL-A2 WA -Y-	450*05*400	C B	FOAM A: 8PCS 7*20*50mm	-	-	-	-	А	8	
-S-	YB16AL-A2 -Y- YB16AL-A2 WA -Y-	150*65*130	A	FOAM A: 1PCS 7*20*50 B: 1PCS 20*20*50 C: 3PCS 35*20*50	B C	1	А	1	С	2	
LTX7A-BS LION -S-	YTX7A -Y- YTX7A-BS -Y-	150*87*91	Shirto Shirto	NO SPACER AND FOAM	-	-	-		-		
	YTX16 -Y- YTX16-BS -Y- YTX16-BS-1 -Y-	16-BS -Y- (16-BS-1	0	SPACER A: 2PCS 85*20*11	-	-	-	-	A B C	2 2	
LTX16-BS LION -S-	YB16B-A -Y- YB16B-A1 -Y-	130*80*103	A B C	B: 2PCS 85*20*17 C: 2PCS 85*20*25	-	-	-	-	A B C	2 2 2	
LTZ12S LION -S-	YTZ12S -Y- TTZ12S-BS -Y-	150*86*92	TO THE PARTY OF TH	SPACER A: 2PCS 85*20*17	-	-	-	-	А	2	
LTPW16L LION -S-	YB16CL-B -Y-	175*100*155	A A	FOAM A: 2PCS 50*20*20	-	-	-		А	2	
LTX20-BS Q LION -S-	YTX20-BS	175*86*130	A SHIDO	SPACER A: 2PCS 85*20*25	-	-	-	-	А	2	
LTX24HL-BS Q LI -S-	YTX24HL-BS -Y-	175*86*130	SHIDO A B	SPACER A: 4PCS 85*20*11 B: 2PCS 85*20*17	-	-	-	-	A B	4 2	

	Replaced St	Standalone Battery dimensions mm	Photo with spacer  Spacer Size (mm)  Thickness * W * L		Spacer configuration Method						
Item	Lead-Acid Battery Type			Length		Width		Hei	ight		
	Dattery Type	(L * W * H)			FOAM NO.	QTY	FOAM NO.	QTY	FOAM NO.	QTY	
LIX30L-BS Q LION -S-	Y60-N24L-A -Y- Y60-N24L-A WA -Y- 52515 -Y- YHD-12 -Y- 53030 -Y- YB30CL-B -Y- YB30L-B -Y- YIX30L-BS -Y-	165X123X162	P SMOO TO	NO SPACER AND FOAM	-	-	-	-	-	-	
LTX14AHL-BS Q LI -S-	YB12C-A -Y- YTX14AH-BS -Y- YTX14AHL-BS -Y-	12/1*75*/120	34*75*132	FOAM A: 2PCS 50*20*36	-	-	-	-	А	2	
	YB14-A2 -Y- YB14-B2 -Y- YB14A-A2 -Y- YB14L-A -Y- YB14L-A2 -Y- YB14L-B2 -Y-	134.73.132			-	-	-	-	А	2	
LTZ8V LION -S-	YTZ8V -Y-	113*69*105	# SNEOD	NO SPACER AND FOAM	-	-	-	-	-	-	



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