



CellPac LITE

End of Life Notification

Summary 09.07.2015



VARTA Storage Overview

Overview of current CellPack LITE product range with notifications of all changes:

Description	Drawing #	Order #	Comment
1/LIC18650-26 HC PCM S WC	712616	56637 201 014	No Change
2S/LIC18650-26 HC PCM S WC	712438	56637 502 013	No Change
2P/LIC18650-26 HC PCM S WC	712498	56637 502 014	No Change
1/LIP 103450 SC PCM S WC	711488	56429 201 015	No Change
1/LIP 423450 AJL PCM S W	700746	56424 201 012	EOL – No Replacement
1/LPP 523450 DL W	700741	56493 201 012	Model Update
1/LPP 503759 DL W	700743	56478 201 012	Model Update
1/LPP 443441 PN W	704043	56445 201 012	Model Update
1/LPP 423566 BE NTC W	704150	56437 201 012	No Change
2P/LPP 503562 DL WC	703291	56422 302 016	Model Update
1/LPP 503562 DL W	700742	56422 201 012	Model Update
EasyPack S	703726	56445 701 099	Model Update
EasyPack L	703728	56446 701 099	Model Update
EasyPack XL	703729	56446 702 099	Model Update

Power Pack Solutions VARTA Storage GmbH

CellPac LITE

Part Change Notification

*Change Summary (changes
only)*



VARTA Storage 1/LIP 423450 Soft-Pack

Description: 1/LIP 423450 AJL

Order # 56424 201 012

Product Information VARTA Storage

1/LIP 423450 AJL PCM 5 W
+ V001 56424 201 012

1. GENERAL
 Battery Pack in 4x14mm case with safety circuit and wire connector
 Cell: 4x 4200mAh
 PHE: 100%
 SOC: 100%
 PTC: No
 ID: No
 Configuration: 1S1P
 Weight: 21g

2. ELECTRICAL SPECIFICATIONS
 Rated Voltage: 3.6V
 Nominal Voltage: 3.7V
 Maximum Capacity: 4200mAh
 Charging Method: Constant Current + Constant Voltage
 Max. Charge Voltage (V): 4.2 (3.0V/cell)
 Max. Charge Current: 1.5A (0.5A/cell)
 Max. Discharge Current: 2.5A (0.5A/cell)
 Max. Discharge Power: 9.25W (0.5A/cell)
 Max. Temperature: 60°C (0.5A/cell)
 Max. Ambient Temperature: 60°C
 Expected Cycle Life: 400 cycles to 80% of rated exchange capacity @ 25°C

3. CELL PROTECTION
 Overcharge Protection: 4.30V ± 20mV (0.5A) / 4.25V (0.5A) / 4.20V (0.5A)
 Overdischarge Protection: 2.80V ± 20mV (0.5A) to 2.50V (0.5A) / 2.4V (0.5A) (0.5A)
 Overcurrent Detection: 2.5A ± 20mV (0.5A) (0.5A) / 2.4A (0.5A) (0.5A)

4. AMBIENT CONDITIONS AND SAFETY
 Operating Range: 0 to +45°C
 Storage: 0 to +45°C
 Shelf Life: 1 year at 20 to +25°C
 Capacity: 4200mAh

CELL PROTECTION
 Please follow VARTA Handling and Safety Procedures for User & Phones.
 The cell case is a high-polymer material according to IEC 62474.
 This battery meets the requirements of Battery Directives and the Battery packs are RoHS-Compliant.
 Minimum Order Quantity: 100 pcs / Order Minimum: 100 pcs - Product for OEM customers only!



Product End of Life
No Replacement!

▶ Last order with VARTA 31st Aug 15

▶ Last delivery 31st Dec 15

VARTA Storage 1/LPP 503759 Soft-Pack

Description: 1/LPP503759 DL

Order # 56478 201 012

- ▶ Capacity 1300 mAh
- ▶ Impedance 140 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

Description: 1/LPP503759 8HH

Order # 56427 201 018

- ▶ Capacity 1400 mAh
- ▶ Impedance 100 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage 1/LPP 523450 Soft-Pack

Description: 1/LPP523450 DL

Order # 56493 201 012

Product Information
VARTA Storage
1/LPP 523450 DL PCM W
• VSD 56493 201 012

1. GENERAL
Battery Pack in which various cell safety-critical elements are integrated.
Cell: LPP 523450 DL
Cell: 1000mAh
Nominal Voltage: 3.7V, nominal 3.20V
Configuration: 1S
Weight: approx. 15g

2. ELECTRICAL SPECIFICATION
Nominal Capacity: 1000mAh typical
Max. Charge Current: 1.000A
Max. Discharge Current: 1.000A
Max. Charge Voltage (V): 4.2 ± 0.010V
Max. Discharge Voltage (V): 3.0 ± 0.010V
Charge Current: 1.000A
Max. Charge Cut Off: 1.000A (limited by inner Ohm)
Discharge Current: 1.000A (limited by cell I_{DC})
Max. Discharge Cut Off: 1.000A
Energy Efficiency: approx. 95%
Explosion Protection: 100% typical, 100% of initial cap.
@ 25°C/50% RH @ 25°C

CELL PROTECTION
Overcharge Detection: 4.275V ± 0.010V (1.7A, 1.000A, 10min), 4.275V ± 0.010V
Overdischarge Detection: 2.20V ± 0.010V (1.0A, 10min), 2.20V ± 0.010V
Overcurrent Detection: 2.2A ± 0.050V

3. AMBIENT CONDITIONS
Temperature Range: -20 to +40°C
Charge: 0 to +40°C
Discharge: 0 to +40°C
Storage: 1 year at 0 to +20°C
1 year at 0 to +40°C
1 year at 0 to +40°C
1 year at 0 to +40°C
Humidity: 95 ± 20% RH

4. ENVIRONMENTAL AND SAFETY
Please refer to the relevant data sheets provided by Cell Partner.
The cell used is a UL recognized component according to UL1642.
This battery meets the requirements of Safety-Critical and the battery meets the PHS-Compliant.
Minimum Order Quantity: 100 pcs - Order Multiple: 100 pcs - Product for OEM customers only.



Description: 1/LPP523450 S

Order # 56457 201 012

Product Information
VARTA Storage
1/LPP 523450 S PCM W
• VSD 56457 201 012

1. GENERAL
Battery Pack in which various cell safety-critical elements are integrated.
Cell: LPP 523450 S
Cell: 1000mAh
Nominal Voltage: 3.7V, nominal 3.20V
Configuration: 1S
Weight: approx. 15g

2. ELECTRICAL SPECIFICATION
Nominal Capacity: 1000mAh typical
Max. Charge Current: 1.000A
Max. Discharge Current: 1.000A
Max. Charge Voltage (V): 4.2 ± 0.010V
Max. Discharge Voltage (V): 3.0 ± 0.010V
Charge Current: 1.000A
Max. Charge Cut Off: 1.000A (limited by inner Ohm)
Discharge Current: 1.000A (limited by cell I_{DC})
Max. Discharge Cut Off: 1.000A
Energy Efficiency: approx. 95%
Explosion Protection: 100% typical, 100% of initial cap.
@ 25°C/50% RH @ 25°C

CELL PROTECTION
Overcharge Detection: 4.275V ± 0.010V (1.7A, 1.000A, 10min), 4.275V ± 0.010V
Overdischarge Detection: 2.20V ± 0.010V (1.0A, 10min), 2.20V ± 0.010V
Overcurrent Detection: 2.2A ± 0.050V

3. AMBIENT CONDITIONS
Temperature Range: -20 to +40°C
Charge: 0 to +40°C
Discharge: 0 to +40°C
Storage: 1 year at 0 to +20°C
1 year at 0 to +40°C
1 year at 0 to +40°C
1 year at 0 to +40°C
Humidity: 95 ± 20% RH

4. ENVIRONMENTAL AND SAFETY
Please refer to the relevant data sheets provided by Cell Partner.
The cell used is a UL recognized component according to UL1642.
This battery meets the requirements of Safety-Critical and the battery meets the PHS-Compliant.
Minimum Order Quantity: 100 pcs - Order Multiple: 100 pcs - Product for OEM customers only.

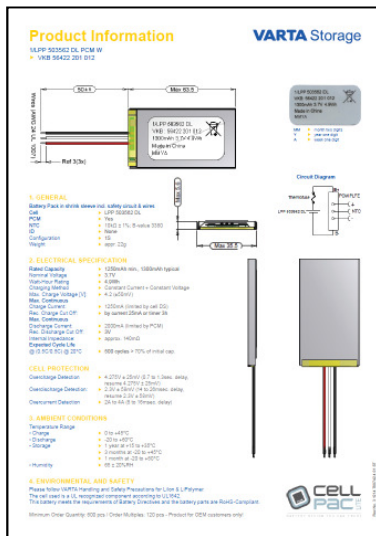
- ▶ Capacity 1000 mAh
- ▶ Impedance 140 mOhm
- ▶ 5,6mm x 34,5mm x 51,5mm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

- ▶ Capacity 1000 mAh
- ▶ Impedance 100 mOhm
- ▶ 5,3mm x 34,5mm x 52mm
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage 1/LPP 503562 Soft Pack

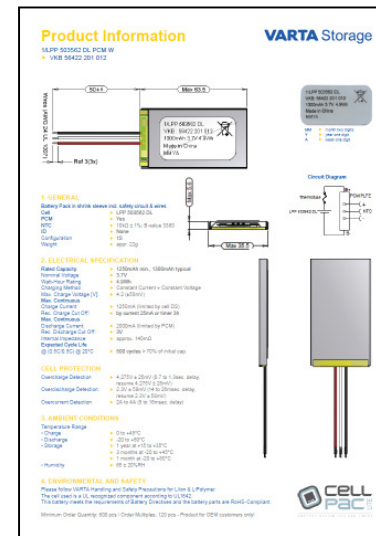
Description: 1/LPP503562 DL

Order # 56422 201 012



Description: 1/LPP 503562 S

Order # 56456 201 012



- ▶ Capacity 1300 mAh
- ▶ Impedance 140 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

- ▶ Capacity 1200 mAh
- ▶ Impedance 100 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage 2P/LPP 503562 Soft Pack

Description: 2P/LPP503562 DL

Order # 56422 302 016

- ▶ Capacity 2600 mAh
- ▶ Impedance 110 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

Description: 2P/LPP 503562 S

Order # 56456 302 012

- ▶ Capacity 2400 mAh
- ▶ Impedance 90 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage EasyPack S

Description: EasyPack S

Order # 56445 701 099

Product Information
VARTA Storage
 16 PIP 43441 PFCM PC
 E23whk S - VNR 56445 701 099

1. GENERAL
 Battery with safety vent and plastic housing
 Cell: 1 CR2032/3V
 PCM: 1 Yes
 NTC: 1 Yes
 ID: 1 2.2 MS 2175
 Configuration: 1 3S
 Weight: 1 36g (12g)

2. ELECTRICAL SPECIFICATION
 Rated Capacity: 1 595mAh typical
 Internal Resistance: 1 2.2 mΩ
 Short-Circuit Current: 1 2.2A
 Charging Voltage: 1 2.35V
 Max. Charge Voltage (FS): 1 4.2V (200mA)
 Charge Current: 1 100mA
 Max. Charge Cut Off: 1 by current: 0.1mA or lower 3h
 Max. Continuous Discharge Current: 1 500mA
 Max. Discharge Cut Off: 1 2V
 Internal Resistance: 1 2.2 mΩ
 Expected Cycle Life: 1 500 cycles (75% of rated cap.)

3. AMBIENT CONDITIONS
 Temperature Range: 1 -20 to +60°C
 Charge: 1 -20 to +60°C
 Discharge: 1 Less than 1 month at 20 to +60°C
 Storage: 1 Less than 1 month at 20 to +60°C
 1 1 year at 0 to +25°C
 1 3 years at 0 to +15°C

4. ENVIRONMENTAL AND SAFETY
 Please follow VARTA Handling and Safety Procedures for User & Operator.
 The cell is approved according to IEC 60086.
 This battery complies with the requirements of Safety Directives and
 the battery pack complies with the requirements of the IEC 62133.
 Minimum Order Quantity: 750 pcs / Order Multiple: 100 pcs - Product for OEM customers only!

- ▶ Capacity 595 mAh
- ▶ Impedance 150 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

Description: EasyPack S

Order # 56455 701 099

Product Information
VARTA Storage
 16 PIP 43441 S PFCM PC
 E23whk S - VNR 56455 701 099

1. GENERAL
 Battery with safety vent and plastic housing
 Cell: 1 CR2032/3V
 PCM: 1 Yes
 NTC: 1 Yes
 ID: 1 2.2 MS 2175
 Configuration: 1 3S
 Weight: 1 40g

2. ELECTRICAL SPECIFICATION
 Rated Capacity: 1 660mAh min., 660mAh typical
 Internal Resistance: 1 2.2 mΩ
 Short-Circuit Current: 1 2.2A
 Charging Voltage: 1 2.35V
 Max. Charge Voltage (FS): 1 4.2V
 Charge Current: 1 100mA
 Max. Charge Cut Off: 1 by current: 0.1mA or lower 3h
 Max. Continuous Discharge Current: 1 500mA
 Max. Discharge Cut Off: 1 2V
 Internal Resistance: 1 2.2 mΩ
 Expected Cycle Life: 1 500 cycles (75% of rated cap.)

3. AMBIENT CONDITIONS
 Temperature Range: 1 -20 to +60°C
 Charge: 1 -20 to +60°C
 Discharge: 1 Less than 1 month at 20 to +60°C
 Storage: 1 Less than 1 month at 20 to +60°C
 1 1 year at 0 to +25°C
 1 3 years at 0 to +15°C

4. ENVIRONMENTAL AND SAFETY
 Please follow VARTA Handling and Safety Procedures for User & Operator.
 The cell is approved according to IEC 60086.
 This battery complies with the requirements of Safety Directives and
 the battery pack complies with the requirements of the IEC 62133.
 Minimum Order Quantity: 750 pcs / Order Multiple: 100 pcs - Product for OEM customers only!

- ▶ Capacity 660 mAh
- ▶ Impedance 115 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage EasyPack L

Description: EasyPack L

Order # 56446 701 099

Product Information
 14-PP-50362 P4 PCM PC
 ECP484 L - VSR 56446 701 099

VARTA Storage

1. GENERAL
 Battery with safety vent and plastic housing
 Cell: LFP50362P4
 IEC: 1500mAh (20h) (Value 3400h 20h)
 ID: 15 10 217
 Configuration: 1S1
 Weight: approx. 21g

2. ELECTRICAL SPECIFICATION
 Rated Capacity: 1130mAh (20h, 100kOhm typical)
 Nominal Voltage: 3.7V
 Minimum Voltage: 2.50V
 Charging Method: Constant Current + Constant Voltage
 Max. Charge Voltage (V): 4.20 (200mA)
 Max. Current: 1000mA
 Discharge Current: 1000mA
 Rec. Charge Cut-Off: 0.05V/cell or lower (3h)
 Rec. Discharge Cut-Off: 2.50V/cell
 Internal Impedance: 100mOhm
 Self-Discharge Rate: 10% (at 20°C)
 Shelf Life: 10 years (at 20°C)
 End of Life: 10% (at 20°C)

3. CELL PROTECTION
 Charge Protection: 4.3 ± 0.02V (0.5 to 1.0sec. delay)
 Discharge Protection: 2.45V ± 0.02V (10 to 100sec. delay)
 Overcurrent Protection: 2.5A to 3.2A (0.5 to 10 sec. delay)

4. AMBIENT CONDITIONS
 Temperature Range: -30 to +45°C
 Storage: 10 years (at 20°C)
 Usage: 10 years (at 20°C)

5. ENVIRONMENTAL AND SAFETY
 Please refer to VARTA Handling and Safety Procedures for User & Employee.
 The cell is approved according to IEC 60086. This battery meets the requirements of battery Directives and the battery packs are RoHS-Compliant. This battery is CE, RoHS-compliant and is certified according to ISO 9001:2015.

CELL PAC

- ▶ Capacity 1130 mAh
- ▶ Impedance 110 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15



Description: EasyPack

Order # 56456 701 099

Product Information
 14-PP-50362 S PCM PC
 ECP484 L - VSR 56456 701 099

VARTA Storage

1. GENERAL
 Battery with safety vent and plastic housing
 Cell: LFP50362S
 IEC: 1200mAh (20h) (Value 3400h 20h)
 ID: 15 10 217
 Configuration: 1S1
 Weight: approx. 21g

2. ELECTRICAL SPECIFICATION
 Rated Capacity: 1200mAh (20h, 100kOhm typical)
 Nominal Voltage: 3.7V
 Minimum Voltage: 2.50V
 Charging Method: Constant Current + Constant Voltage
 Max. Charge Voltage (V): 4.2V
 Max. Current: 1000mA
 Discharge Current: 1000mA
 Rec. Charge Cut-Off: 0.05V/cell or lower (3h)
 Rec. Discharge Cut-Off: 2.50V/cell
 Internal Impedance: 99mOhm
 Self-Discharge Rate: 10% (at 20°C)
 Shelf Life: 10 years (at 20°C)
 End of Life: 10% (at 20°C)

3. CELL PROTECTION
 Charge Protection: 4.3 ± 0.02V (0.5 to 1.0sec. delay)
 Discharge Protection: 2.45V ± 0.02V (10 to 100sec. delay)
 Overcurrent Protection: 2.5A to 3.2A (0.5 to 10 sec. delay)

4. AMBIENT CONDITIONS
 Temperature Range: -30 to +45°C
 Storage: 10 years (at 20°C)
 Usage: 10 years (at 20°C)

5. ENVIRONMENTAL AND SAFETY
 Please refer to VARTA Handling and Safety Procedures for User & Employee.
 The cell is approved according to IEC 60086. This battery meets the requirements of battery Directives and the battery packs are RoHS-Compliant. This battery is CE, RoHS-compliant and is certified according to ISO 9001:2015.

CELL PAC

- ▶ Capacity 1200 mAh
- ▶ Impedance 99 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

VARTA Storage EasyPack XL

Description: EasyPack XL

Order # 56446 702 099

Product Information **VARTA Storage**
2P1PFR0262PH.PCM.PC
EasyPack XL - 1x50 56446 702 099

1. GENERAL
Battery with safety vent and plastic housing
Cell: LFP 100000 S
PCB: 100
MTC: 22 40 47% @ 25°C (34 000 44%
IC: 24 90 57%
Discharge rate: approx. 45g

2. ELECTRICAL SPECIFICATION
Rated Capacity: 2260mAh min., 2000mAh typical
Nominal Voltage: 3.7V
Self-Discharge: 3% per month at 20°C
Charge Method: Constant Current + Constant Voltage
Max. Charge Voltage (V): 4.20 (±0.01V)
Max. Continuous Discharge Current: 1800mA
Max. Charge Cut-Off: 4.20V (checked at 10mA)
Max. Continuous Discharge Current: 2000mA
Max. Charge Cut-Off: 3.9V (checked at 10mA)
Max. Discharge Cut-Off: 2.9V (checked at 10mA)
Internal Impedance: approx. 110mΩ
Capacity Retention (at 25°C): >100 cycles (70% of initial cap.)

3. CELL PROTECTION
Overcharge Detection: 4.2 ± 0.02V (0.5 to 1.0mA)
Overdischarge Detection: 2.90 ± 0.02V (10 to 100mA)
Overcurrent Detection: 20mA (inrush current), 2.0A (inrush current), 2.0A (inrush current), 2.0A (inrush current)

4. AMBIENT CONDITIONS
Temperature Range: -20 to +45°C
Charge: -20 to +45°C
Discharge: -20 to +45°C
Storage: -20 to +45°C (at 20% to 40% SOC)

5. ENVIRONMENTAL AND SAFETY
Please refer to VARTA's website for detailed information.
This battery meets the requirements of Battery Directive and the battery parts are RoHS Compliant. This battery is not hazardous and is classified according to IEC 62133 edition 1.
Minimum Order Quantity: 200 pcs (Order Multiple: 50 pcs) - Product for OEM customers only.



- ▶ Capacity 2260 mAh
- ▶ Impedance 110 mOhm
- ▶ Last order with VARTA 31st Aug 15
- ▶ Last delivery 31st Dec 15

Description: EasyPack XL

Order # 56456 702 099

Product Information **VARTA Storage**
2P1PFR0262 S.PCM.PC
EasyPack XL - 1x50 56456 702 099

1. GENERAL
Battery with safety vent and plastic housing
Cell: LFP 100000 S
PCB: 100
MTC: 22 40 47% @ 25°C (34 000 44%
IC: 24 90 57%
Discharge rate: approx. 45g

2. ELECTRICAL SPECIFICATION
Rated Capacity: 2400mAh min., 2000mAh typical
Nominal Voltage: 3.7V
Self-Discharge: 3% per month at 20°C
Charge Method: Constant Current + Constant Voltage
Max. Charge Voltage (V): 4.20 (±0.01V)
Max. Continuous Discharge Current: 2400mA
Max. Charge Cut-Off: 4.20V (checked at 10mA)
Max. Continuous Discharge Current: 2000mA (checked by PFCM)
Max. Discharge Cut-Off: 2.9V (checked at 10mA)
Internal Impedance: approx. 68mΩ
Capacity Retention (at 25°C): >100 cycles (70% of initial cap.)

3. CELL PROTECTION
Overcharge Detection: 4.2 ± 0.02V (0.5 to 1.0mA)
Overdischarge Detection: 2.90 ± 0.02V (10 to 100mA)
Overcurrent Detection: 20mA (inrush current), 2.0A (inrush current), 2.0A (inrush current), 2.0A (inrush current)

4. AMBIENT CONDITIONS
Temperature Range: -20 to +45°C
Charge: -20 to +45°C
Discharge: -20 to +45°C
Storage: -20 to +45°C (at 20% to 40% SOC)

5. ENVIRONMENTAL AND SAFETY
Please refer to VARTA's website for detailed information.
This battery meets the requirements of Battery Directive and the battery parts are RoHS Compliant. This battery is not hazardous and is classified according to IEC 62133 edition 1.
Minimum Order Quantity: 200 pcs (Order Multiple: 50 pcs) - Product for OEM customers only.

- ▶ Capacity 2400 mAh
- ▶ Impedance 68 mOhm
- ▶ No mechanical changes
- ▶ First orders VARTA 1st Sep 15
- ▶ First deliveries ~12 weeks

Power Pack Solutions
VARTA Storage GmbH



Thank you!

