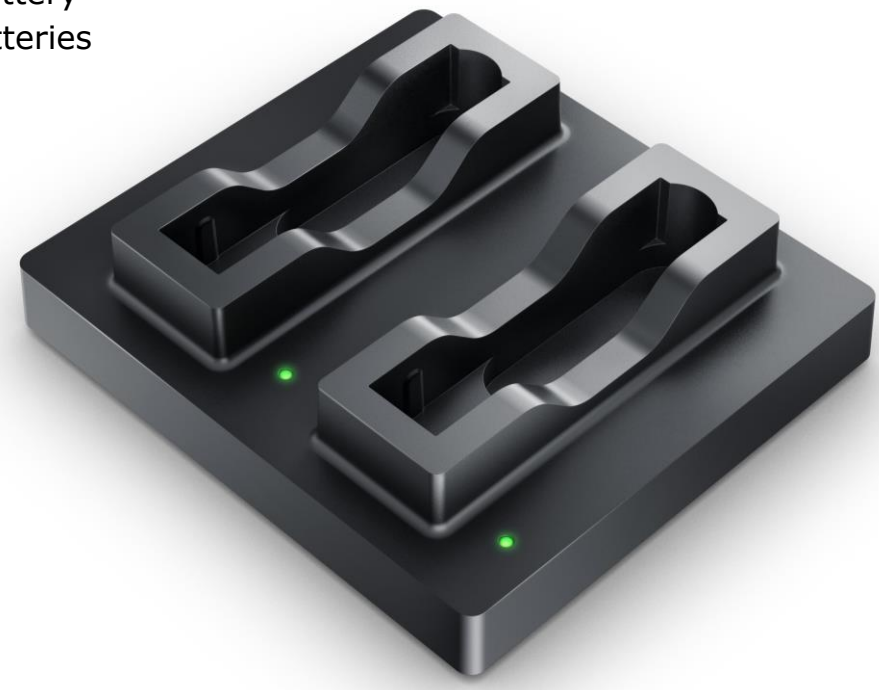
# PN: D90552

Dual bay standard battery
charger for smart batteries



## Features:

- 60W dual bay charger
- For the standard battery form factors D920xx or smart batteries with a similar footprint
- Optimized charging process for our smart batteries:
  - Longer cycle life
  - Faster charging
- Simple operation – Plug and Play
- Automatic recognition and calibration of smart batteries
- External power supply for worldwide use
- Country specific AC input cables available

## Applications:

Standard charging station for mobile devices used in medical, industrial and consumer markets

# Specification

| Input | |
|---|---|
| Voltage | 19.00 – 26.00VDC |
| Current | 3.40A max. |
| Power | 65.00W |
| Protection | Over current (fuse protected), under voltage |

| Output | |
|---|---|
| Voltage | 0 - 17.40VDC |
| Current | 0 - 4.80A |
| Voltage tolerance | ±1% max. |
| Current tolerance | ±10% max. @1.00A, ±3% max. @4.00A |
| Charge power | 30.00W max. per Bay |
| Protection | Short circuit, over temperature shutdown, input-/output over current |

| Environmental | Operation: | Storage: |
|---|---|---|
| Ambient Temperature | 0°C to 40°C | -30°C to 80°C |
| Pressure & Altitude | 1060hPa to 533hPa<br>-382m to 5000m | 1060hPa to 533hPa<br>-382m to 5000m |
| Humidity (non-condensing) | 8% to 90% r.H. | 5% to 95% r.H. |

| General | |
|---|---|
| Efficiency | ~95% at 100% load |
| Indicator | Multi-color LED (green, red, orange) |
| Battery types | Standard battery form factors RRC20xx or smart batteries with a similar footprint |
| Green procurement | RoHS 2011/65/EU + 2015/863/EU<br>REACH 1907/2006<br>WEEE 2012/19/EU<br>Chinese RoHS |
| Cooling | convection cooled |

| LED Indications | |
|---|---|
| One time Red/Orange/Green | Self-test: Charger is ready for use. |
| Red/Green blinking | Battery recognition and initialization. |
| Orange blinking | The battery is currently being calibrated. |
| Orange light | The inserted battery is of the correct type and is currently being charged. |
| Green light | The battery is charged and can be removed for use. |
| Red blinking | The battery is too hot or too cold to be charged without damage.<br>If the battery is too cold it will be charged as soon as it has warmed up sufficiently. If the battery is too hot it should be removed to cool down. |
| Red light | The battery is damaged or it is a conventional battery which cannot be recharged. |

| Charger Mechanical Details | |
|---|---|
| Housing dimensions (LxWxH) | 155 x 175 x 43mm |
| Weight | 325g (excluding power supply) |

| Safety & EMC | In combination with included external AC/DC power supply | |
|---|---|---|
| Regulatory approvals | Europe<br>International | EN62368-1 (CE)<br>IEC62368-1 (CB) |
| Electromagnetic Emissions | Europe<br>USA | EN55011, EN55032, level B<br>FCC15 class B |
| Electromagnetic Immunity | ESD immunity<br>Electromagnetic field immunity<br>EFT / Burst<br>Surge<br>Conducted Immunity<br>Magnetic Fields<br>Voltage dips, short instrumentations & voltage variations<br>Immunity characteristics | EN/IEC61000-4-2<br>EN/IEC61000-4-3<br>EN/IEC61000-4-4<br>EN/IEC61000-4-5<br>EN/IEC61000-4-6<br>EN/IEC61000-4-8<br>EN/IEC61000-4-11<br><br>EN55024 |

# Specification for external AC/DC power supply

| Input | |
|---|---|
| Voltage | 100.00 – 240.00VAC ±10%, 50-60Hz |
| Current | 1.70A max. |
| Stand by power | < 0.21W @ no load |

| Output | |
|---|---|
| Voltage range | 19.00VDC ± 5%; Ripple < 300mV$_{pk-pk}$ |
| Power | 65.00W max. |
| Current range | 3.42A max. |
| Protection | Short circuit, over voltage, over current, over temperature |

| General | |
|---|---|
| Efficiency | California's Energy Efficiency Level VI |
| Ripple & Noise | 300mV (p-p) |

| Power Supply Mechanical Details | |
|---|---|
| Standard output connector | DC barrel jack, 5.5 x 2.5 x 11mm |
| Housing dimensions (LxWxH) | 95 x 50 x 25.4mm |
| Weight | 270g |
| Cable length | 1600mm ±50mm |

| Regulatory Approvals | | |
|---|---|---|
| Approvals | Europe | CE |
| | International | CB |
| | USA & Canada | cULus |
| | Australia | RCM |
| | Russia (Customs Union) | EAC |
| | Korea | KC |
| | China | CCC |
| | Japan | PSE |
| | India | BIS |
| | Taiwan | BSMI |
| | Mexico | NOM |
| | Argentina | IRAM |
| | South Africa | SABS |
| | Singapore | Safety Mark |
| | United Kingdom | UKCA |
| | Morocco | CMIM |

## Recommended Accessories

| Type | | Product | P/N | Application |
|---|---|---|---|---|
| 3-pol AC-Cable |  | US-Version<br>EU-Version<br>UK-Version<br>AU-Version | 210950<br>210951<br>211133<br>211134 | Country specific power cable for standard battery chargers from RRC and PS65. |
| Car Adapter DC/DC |  | SMB-CAR | 110041 | 90W car adapter with USB charging port. Power suppling in cars and trucks for standard battery chargers and power management modules from RRC or mobile devices. |