

# Meet the LUCAS<sup>®</sup> 3 Chest Compression System



R.S. DB3981E

Lea minuciosamente el manual de instrucciones de uso

# LUCAS System

Smart. Hardworking. Built for the future.

The LUCAS chest compression system has been helping lifesaving teams around the world deliver high-quality, Guidelines-consistent compressions; in the field, on the move and in the hospital.

With over 12 years of clinical experience, we proudly present the third generation LUCAS device, built on the LUCAS legacy. The LUCAS 3 chest compression system has improved features to facilitate maintenance and handling and allows for new insights through easy, wireless access to device data.



# LUCAS Case

Strong. Smart. Modern.

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## Hard Shell Case

- Polycarbonate
- Easy to clean
- Reflective badging
- Large multi-point handles
- Large zipper grips
- Adjustable backpack straps



## Molded Design

- Compact, portable and durable
- Protected and organised inside
- Smart storage compartment of accessories (batteries, straps, suction cups)
- Can also be used with the LUCAS 2 device



## Top Window

- Quick check of battery status (press MUTE button)



## Charge Port (on back of hard shell case)

- Charge the device without removing from the case

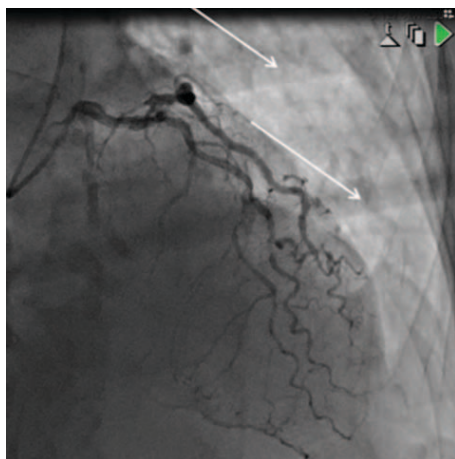
# LUCAS Slim Back Plate

Simple. Skinny.



## Single Piece

- ~50% slimmer
- Easy to clean
- Tapered edge for easier adjustment
- Larger contact area for stability
- Additional attach points for transportation
- Can be used also with LUCAS 2 devices



## Cath Lab/Fluoroscopy

- Allows for emergency angiography/angioplasty during ongoing LUCAS CPR
- Vague grid shadows in oblique views (see angiogram)
- For optimal performance; use PCI back plate (available separately)

# LUCAS Device Connectivity

Connected. Insights.

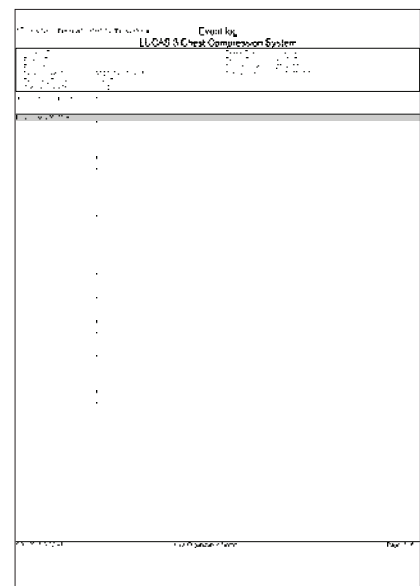
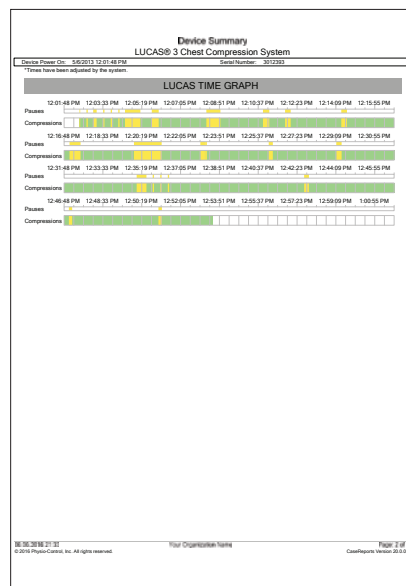
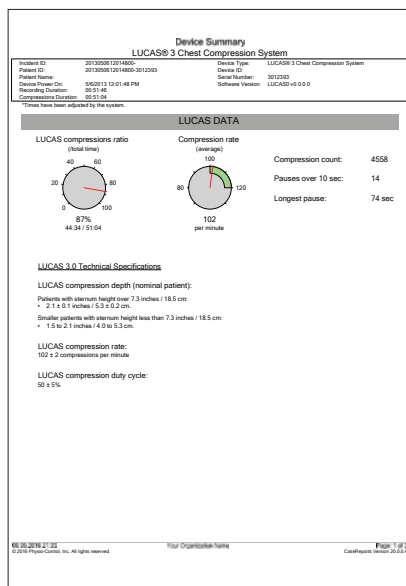
## Data-Enabled

- Bluetooth® connectivity
- Easy to pair with PC/Windows®
- LUCAS Report Generator software
- Post-event performance reports for review



## LUCAS Report Generator

- Review LUCAS device performance data at the end of the case or shift
- Device summary, timeline and event log
- LUCAS chest compression statistics, pauses, user modes and device alarms and alerts



## Device Summary

- Quick glance dials of ratio and rate
- Compression and pause data

## Time Graph

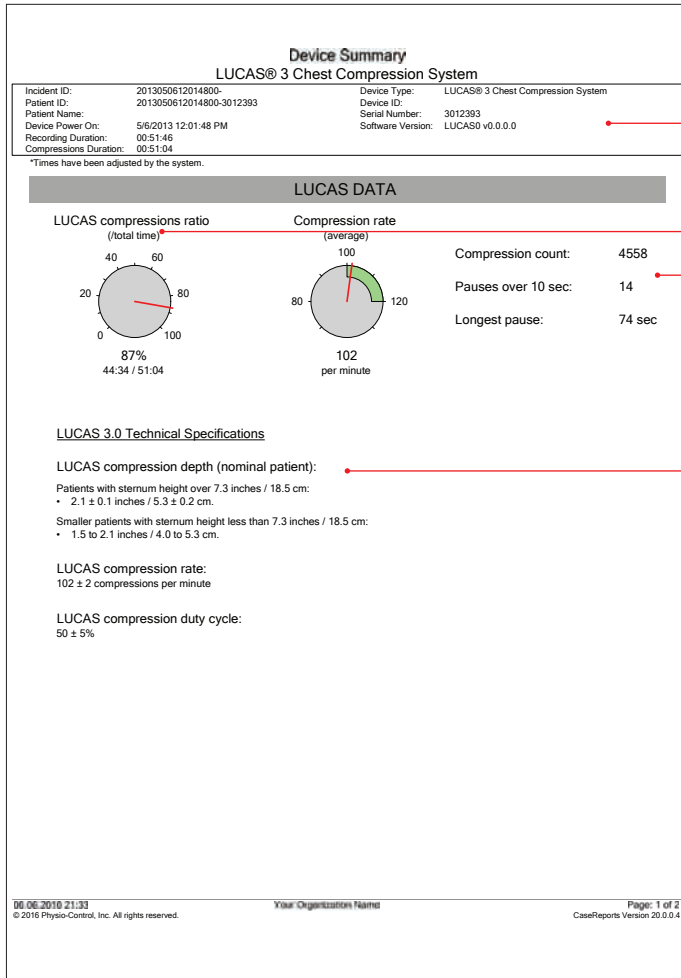
- Timeline from first LUCAS device compression to last
- Pauses automatically highlighted

## Event Log

- Insight into user interaction, device operational mode, battery information and any alarms

# LUCAS Device Report

Connected. Insights.



## Device Summary

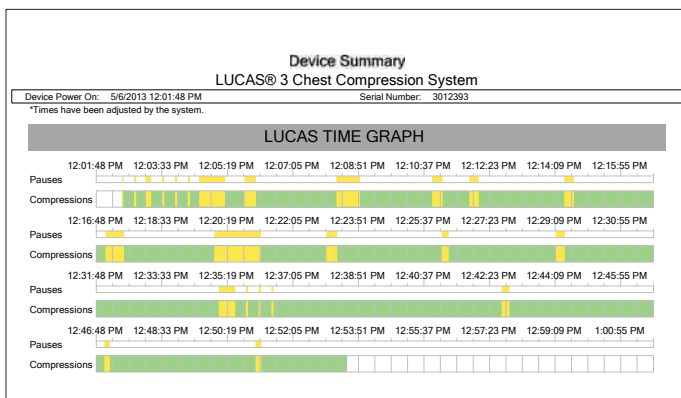
Device name, case date, case time and duration

Consistent, high-quality LUCAS compressions

Compression count, pauses >10 seconds and longest pause readout

Compression ratio between first and last LUCAS compression

LUCAS device technical specifications



## Time Graph

- Time Axis
- Pauses (automatic by device or user initiated)
- Compressions (device only)

# Specifications

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## Compressions

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**Compression Frequency:** 102 ± 2 compressions per minute

**Compression depth (nominal patient):**

- 53 mm ± 2 mm for patients with sternum height over 185 mm
- 40 to 53 mm for patients with sternum height less than 185 mm

**Compression/Decompression Duty Cycle:** 50 ± 5%

**Patients Eligible for Treatment:**

- Sternum height of 17 – 30.3 cm
- Maximum chest width: 45 cm

The use of the LUCAS device is not restricted by patient weight.

## Device specifications

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**Height x Width x Depth (assembled):** 56 x 52 x 24 cm

**Height x Width x Depth (stowed in backpack):** 58 x 33 x 26 cm

**Weight device with battery (no straps):** 8.0 kg

**Device storage temperature:** -20°C to +70°C

**Device IP Classification:** IP43

## Operation

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**Power Source:** Battery – Rechargeable Lithium-ion Polymer (LiPo), and (optional) external power supply or car cable

**Battery run time (typical):** 45 minutes (typical), prolonged operation time with (optional) external power supply or car power cable

**External Power supply:** 100-240VAC, 50/60Hz, 2.3A, Class II, Output 24VDC, 4.2A

**Car Power Cable:** Voltage / Current 10-28VDC / 0-10A

**Operation temperature:**

- 0°C to +40°C
- -20°C for 1 hour after storage in room temperature

## Battery specifications

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**Battery charge time:**

Charged in the LUCAS device using external Power Supply – less than two hours at room temperature (+22°C)

Charged in the external LUCAS Battery Charger – less than four hours at room temperature (+22°C)

**Battery weight:** 0.6 kg

**Battery capacity:** 3300 mAh (typical), 86 Wh

**Battery voltage:** 25.9 V

**Interval for replacement of battery:** recommendation to replace battery every 3 to 4 years or after 200 uses (of more than 10 minutes each time)

**Battery charge temperature:** 0°C to +40°C (+20°C to +25°C preferred)

**Battery storage temperature:** 0°C to +40°C and -20°C to +70°C ambient for less than a month

**Battery IP Classification:** IP44

## Data transmission post-event

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**Radio module:** Bluetooth® v2.1 + EDR Class 1 - up to 3Mbps, Modulation method; 8DPSK, π/4 DQPSK, GFSKFSK, Operating channel; BT 2.4GHz: Ch. 0 to 78, Frequency range; 2.4000 to 2.4835 GHz, Radio frequency; Output Power (Bluetooth) Max + 10dBm

*All specifications are at 20-25°C unless otherwise stated.*

For further information please contact your local Physio-Control representative or visit our website at [www.physio-control.com](http://www.physio-control.com)



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