corpuls1

SMALL, HANDY AND VERSATILE

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As small, light and compact as it is, the **corpuls1** was specially developed for the requirements of hospitals, fire departments, first responders, ambulance services, doctors offices and disaster management. A compact but fully-fledged Defibrillator/ Patient Monitor that is always right for the job when space and maneuverability are crucial.

Its biggest advantage: it's light weight. The **corpuls1** weighs just 2.3 kg, but is a fully-fledged Defibrillator and Patient Monitor.

The user has an optimal view of up to 3 curves and 4 vital parameters on the transflective 5.7'' display. The intuitive user interface guarantees easy operation. Depending on the users preference, the most important parameters are always in view: ECG, cpr feedback, heart rate, pleth, SpO$_2$ and optionally SpHb, SpCO, or SpMet.

Depending on the mission, the **corpuls1** can be used as an automated external defibrillator (AED) or as a manual defibrillator. In addition, the **corpuls1** can be optionally equipped with a pacer with FIX/DEMAND modes for the treatment of arrhythmias.

Just 2.3 kg incl. battery

Therapy accessories compatible

Shock protection

Softkeys and function keys

SD card slot

Oximetry

6 lead ECG

primeCPR Feedback

Intuitive 1-2-3 operation

Lithium-ion battery

SPECIFICATIONS

- **Light** weight, **compact** and **handy**
- Available with **primeCPR feedback**
- **AED mode/manual mode** and **pacer therapy (FIX/DEMAND)** for a wide range of application
- Use with **adhesive electrodes**, **hard paddles** or **shock spoons** possible

FULLY COMPATIBLE

- **corPatch electrodes, sensors, batteries and cables** are identical to the **corpuls3** – for fast handover of the patient.
- **Analysis of mission data** in **corpuls.manager** is possible for both systems.
- **Standardized device user interface** allows for intuitive handling.

More information on the **corpuls1** can be found on our product site:
www.corpuls.world/en/products/corpuls1

primeCPR feedback sensor

The **corpuls1** is equipped with a CPR feedback function to improve the quality of chest compressions. The **primeCPR** feedbacksensor is placed on the lower half of the sternum. It measures the rate and depth of chest compressions during resuscitation.

Depending on the configuration, their quality is shown on the display (bar graphs) and voice prompts.[1] The bar graph shows the pressure, depth and quality of chest compressions. This view can be optionally set in AED mode and provides support and feedback to the rescuer.[2]

▶ The **primeCPR** feedback sensor is attached within a few seconds.

Color coding: depth good/bad

■ optimal depth   ■ oo light   ■ too deep

CPR

Bar length shows current pressure depth

Hatched area for additional visualisation of the optimum printing depth

Additional voice feedback

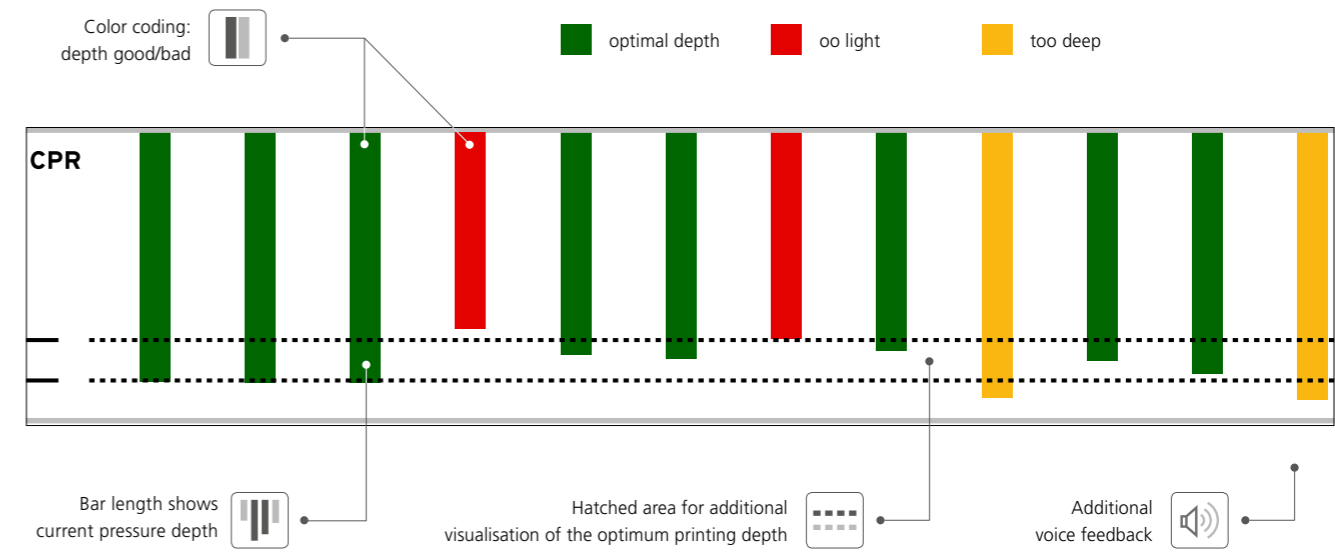# ULTRA COMPACT PATIENT MONITOR AND DEFIBRILLATOR

The **corpuls1** is not only lightweight and easy to use. It delivers medical performance at the highest level, making it ideal for clinical and preclinical applications.

MONITORING
The intuitive user interface guarantees easy operation. On the 5.7″ screen you can always keep an eye on the ECG, heart rate and pulse oximetry. Up to 3 curves and 4 parameters are displayed.

REANIMATION
Depending on the mission, the **corpuls1** can be used as an automated external defibrillator (AED) or as a manual defibrillator. Thanks to the same high-quality HV unit the **corpuls1** can also deliver life-saving shocks in an emergency situation.

▶ The **primeCPR** feedback sensor as a reusable sensor[2] is made of robust plastic. It can be easily disinfected and reprocessed according to the hygiene plan.

▶ Optionally the **primeCPR** easy feedback sensor is available as a disposable product with an intermediate cable.

[1] Quelle: F. Lakomek et al.: Real-time feedback improves chest compression quality in out-of-hospital cardiac arrest: A prospective cohort study
[2] only when using the **primeCPR** feedback sensor. The reusable sensor is an OEM product from Schiller AG.

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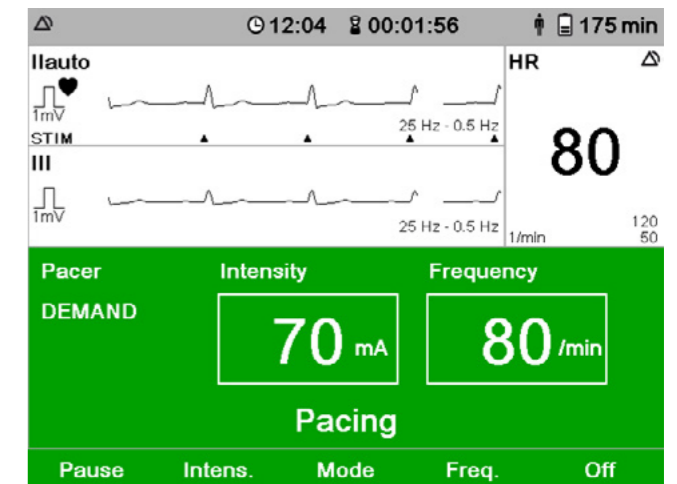# OPTIMAL SUPPORT FOR EMERGENCY SERVICES AND HOSPITAL PERSONNEL

With its compact and lightweight design, the **corpuls1** is the universal partner in hospital. It monitors patients during hospital transport and serves as a defibrillator during resuscitation. The range of use in hospital is further broadened by the pacer therapy option (both FIX and DEMAND).

PACER

The external pacer of the **corpuls1** enables electrical stimulation of the heart muscle and can supplement or positively influence the function of the heart muscle.

In FIX operating mode, the pacer stimulates the heart muscle with the set stimulation frequency regardless of the patients own heart rate.
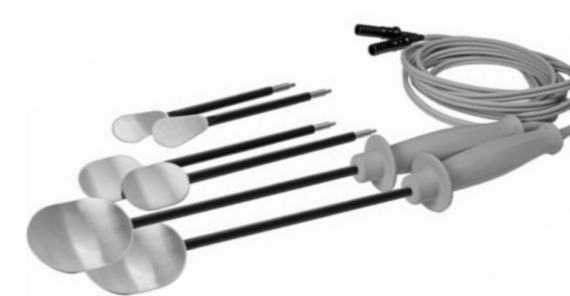
In DEMAND mode the **corpuls1** analyses the ECG via the 4-pole ECG monitoring cable. The pacer only stimulates if the patients natural frequency is lower than the set stimulation frequency. Pacing during the vulnerable phase is prevented by the QRS complex detection.

SHOCK SPOONS AND SHOCK PADDLES

The **corpuls1** offers different defibrillation options. **corPatch** therapy electrodes, shock paddles and shock spoons can be used.

For this reason, the **corpuls1** is also ideal for hospital use – whether in the cath lab or as a defibrillator on a resus trolley.

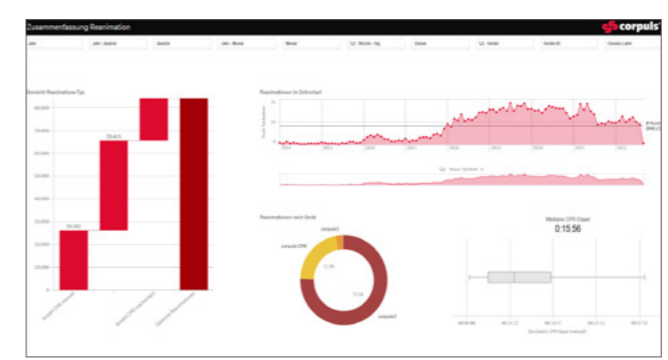▶ *Shock Spoons in three sizes for use in open heart surgery.*

▶ *corpuls1 with shock paddles*

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corpuls.manager

MISSION DEBRIEFING

corpuls.mission is the ultimate digital addition to all **corpuls** devices. The goal is to obtain detailed analysis from existing mission data and to generate knowledge, thus optimizing patient care.

▶ The entirety of all missions can be evaluated and visualized with the help of dashboards in order to clarify important questions at a glance.

▶ The mission history shows you an exact evaluation of all values and curves at any point in time. It can be navigated to the second and curves can be shown or hidden.

corpuls.manager ANALYSE

corpuls.manager ANALYSE as a data management solution enables data import from the **corpuls1** SD card. The mission data of all corpuls devices are centrally managed and evaluated here. The extensive filter, sort and search functions are ideal for quality management and controlling.

corpuls.manager REVIEW

With **corpuls.manager REVIEW**, you can review the mission from the **corpuls1** down to the second.
Exactly what's required for optimal debriefing and the best possible documentation for quality assurance.

THE HANDY UNIVERSALIST

Competent and comprehensive on-scene care is crucial in an emergency. Therefore, it is important to ensure that the transfer of the patient from the first responders onto further care by the emergency services can be carried out as quickly and smoothly as possible. As with all **corpuls** defibrillators, electrodes, sensors and cables from the **corpuls1** can be used with the **corpuls3**.

PULSE OXIMETRY

The integrated pulse oximeter (optional) enables the monitoring of oxygen saturation, pulse rate and pleth.

SpCO SCREENING

The **corpuls1** is optionally equipped with SpCO measurement. This can be used to easily detect possible carbon monoxide poisoning at an early stage – whether in patients or emergency personnel.

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SOPHISTICATED ENERGY MANAGEMENT

The best energy management is one that the user doesn't have to think about. The intelligent energy management of the **corpuls1** fulfills exactly this requirement.

- Extremely powerful battery
- **No time-consuming manual charging** and battery replacement required
- **The right connector/cable variant** for every mission (e.g. Mag-Code, Amphenol, SELV, open end, etc.)
- Connectors comply with the **ISO 4165** standard

Remove the **corpuls1** – always ready for use – from the charging bracket or the magnetic charging connector. The powerful lithium-ion battery reliably supplies energy to the **corpuls1** – for up to 8 hours and 45 minutes – even at –20 °C. You can always see the remaining running time on the display.

▶ *Powerful, easily replaceable battery*

ACCESSORIES

BAGS
- **Side bags** for cables, sensors and accessories
- **Pre-connected cables,** to avoid cumbersome plugging and unplugging
- Magnetic and lockable front bag
- Front bag for pre-connected **corPatch** therapy electrodes

BRACKET
- **Guides** to intuitively insert the device into the charging bracket
- **Power supply 12 V DC** (with mains adaptor, optional)
- **EN 1789**

SUPPORT FEET
- **Support feet** for stability and an optimal viewing position
- Foldout easily
- Approx. **45° angle**

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SPECIFICATIONS

GENERAL SPECIFICATIONS
- **Dust and jet-water proof** according to IP55
- **Vibration and shockproof** according to EN 1789
- **Alarm light, speakers**
- **Audio recording**
- **Power supply** 12 V DC, 100–250 V AC with mains adapter
- **Weight:** 2.3 kg
- **Size** (LxHxD): 26 cm x 17 cm x 7 cm (without bag)
- **Run time**: 6 h 30 min

PATIENT MONITORING
- **5.7'' colour display**, back-lit
- **3 curves** and up to **4 vital parameters**
- **6 lead ECG**
- **Masimo Rainbow SET®** for SpO$_2$, PR, PI, SpCO, SpMet, SpHb

DEFIBRILLATOR/PACER
- **Min. 200 shocks** with 200 J
- **Charge time** with full battery: ca. 5.5 s
- **Automated External Defibrillator** (AED)
- **Manual Defibrillator**
- **Synchronised Cardioversion**
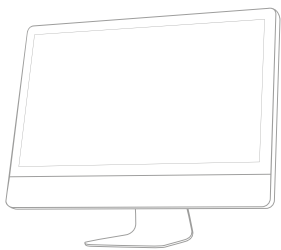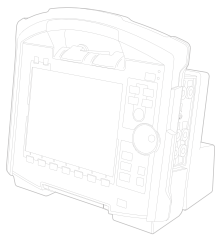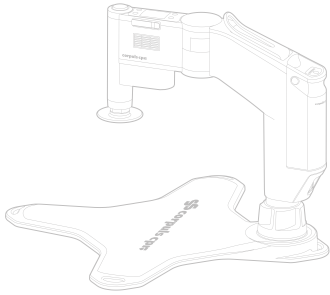- Pacer with **2 modes**: FIX & DEMAND (optional)

primeCPR FEEDBACK*
- Available as **reusable** or **disposable sensor**
- **Measures** (WxHxD): 10,5 cm x 6,5 cm x 2,5 cm
- **Weight**: 152 g

DATA MANAGEMENT
- **SD® memory card** (capacity up to 408 hrs/2 GB)

* only in combination with **primeCPR feedback sensor**

For over 40 years, **corpuls®** has developed and produced innovative high-end equipment for emergency and intensive care medicine. Today, in our headquarters in Kaufering, over 400 hearts each beat around 60,000 times every work day while aspiring to meet the high standards of rescue workers from over 75 countries around the world.

Since day one, **corpuls** defibrillators, patient monitoring systems and chest compression devices have set the standard in the realisation of the most advanced insights in medical science, as well as in terms of innovation and ergonomics. Complemented by smart telemedicine and data analysis across devices, the **corpuls.system** guarantees reliable and safe help in the fight for human lives.

corpuls®

The **primeCPR feedback sensor** is a product of **Schiller AG**
Altgasse 68 | 6341 Baar | Switzerland

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