

Defibrillator/Monitor (Lifegain CU-HD1)

Description

1. Product overview

LifeGain CU-HD1 – this is the company's high end defibrillator/monitor intended for hospital use. It has defibrillation capabilities in AED and manual modes and may use disposable electrode pads and external and internal paddles for shock delivery. It has a transcutaneous pacer for temporary pacing of patients with low heart rate. It has an SPO2 module for the monitoring of oxygen saturation in the patient's blood and a 12-lead ECG monitor for the evaluation and monitoring of the patient's ECG.

It has a memory card port for the storage of acquired signals and an integrated printer for the generation of hard copies of the patient's physiological signals. These features make this defibrillator suitable for use inside a hospital. This product is a defibrillator designed for qualified emergency staff and medical professionals to deliver defibrillating shocks to victims of sudden cardiac arrest and restore the normal ECG rhythm.

* AED Mode

AED Mode is delivered to patients who are exhibiting the symptoms of Sudden Cardiac Arrest (SCA) including ventricular fibrillation, ventricular tachycardia, in order to bring them back to life by delivering electric shock and restoring the normal ECG rhythm.

In the AED mode, defibrillation pads must be used. These defibrillation pads work to obtain the ECG signal of patients and deliver electric shock according to the patients' condition.

* Manual Mode

Manual Mode is divided into two functions such as asynchronous defibrillation and synchronous cardioversion. In asynchronous defibrillation, the usage target is the same in AED Mode.

For the asynchronous defibrillation treatment in the manual mode, the user is able to choose the level of electric shock energy from the range of 1-200 joule by the use of pads or paddles. On the other side, when used for synchronous cardioversion, it is used on patients with the symptoms of atrial fibrillation. It is designed to analyze the R-wave of ECG QRS and deliver R-wave synchronized electric shocks.

In the Manual mode, synchronous cardioversion treatment can be delivered to patients with rapid atrial fibrillation, ventricular tachycardia, and cardiac ischemia.

* Pacer Mode

Pacing is a method applied to patients who had lost natural cardiac movement functions, mostly used on patients with bradycardia. LiFEGAIN CU-HD1 functions to support non-invasive pacing, a way of helping maintain a patient's pulse by attaching its electrode to the patient's skin and delivering artificial electric stimulation to the heart. Pacing mode is divided into the 'Fixed mode' and the 'Demand mode'.

* Monitoring Mode

Patient monitoring mode features the ECG monitoring function and the function to measure the level of SpO2, functional oxygen saturation in the blood.

For the ECG monitoring function, you can discriminately use the 3-lead, 5-lead, 12-lead ECG cables. During the patient monitoring session, it is possible to analyze the ECG results to use the alarming function according to the conditions such as the number of pulses, ventricular fibrillation or ventricular tachycardia etc. If using an ECG cable, convert "Rotary Switch" to "Monitor mode" before usage.



*** Key features**

- Manual and AED Operation
- Defibrillation using paddles or pads
- Synchronized cardioversion
- Efficient and effective e-cube Biphasic technology (BTE Type)
- SpO2 pulse oximetry with alarm
- ECG monitoring (3 Lead ECG / 5 Lead ECG / 10 Lead ECG)
- Noninvasive pacing mode



Specification

Model Name	Item Description
Lifegain CU-HD1	Defibrillator / Monitor
Parameter Description	Specified
DEFIBRILLATOR	
Operating Modes	Manual / Semi automatic
Waveform	Biphasic (Truncated exponential type)
Shock Delivery	Via Paddles or multi-function defibrillator electrode pads
Reusable External Paddle	Yes
Pediatric Paddle	Yes
Multifunction Defi Pads (Disposable)	Yes
Energy sequence	Yes
Manual mode, J	1~10, 15, 20, 30, 50, 70, 100, 120, 150, 170, 200 J
Synchronous Cardioversion	Yes
AED mode, J	Fixed energy at 200 Joules
Text and Voice Prompts	Yes
Protocol configured	Yes
ECG MONITOR	
ECG acquisition	Disposable electrodes
Monitors with ECG	YES
Input	Lead I, II, III (3 Lead ECG cable)

	Lead I, II, III, aVR, aVL, aVF or V (5 Lead ECG cable)
	Lead I, II, III, aVR, aVL, aVF or V1, V2, V3, V4, V5, V6 (10 Lead ECG cable)
	(Display View : All 12 Lead ECG waves display simultaneously)
Electrodes	Yes
ECG display	Yes
Message display	Yes
Heart rate display	30 to 300 bpm (± 3 bpm)
ECG size	5, 10, 20mm/mV and Auto-gain
Heart Rate/Arrhythmia Alarm	HR, Asystole, VF, VT
Lead Fault message	Yes
NONINVASIVE PACING	
Waveform	Monophasic Truncated Exponential
Mode	Demand and Fixed mode
Amplitude Accuracy	0 ~ 200mA (± 5 mA)
Pulse Width	20ms ($\pm 1.5\%$)
Pulse Rate	30 ~ 180ppm ($\pm 1.5\%$)
Refractory Period	340 msec (30 to 80ppm) / 240 msec (90 to 180 ppm)
SpO2 Pulse Oximetry	
SpO2 monitoring	Yes (Nellcor)
Saturation	70~100% (± 3 digits)
Pulse Rate	20~250bpm (± 3 bpm)
Perfusion	0.2%
SpO2 alarm	YES (Less than minimum setting rate, Over than maximum setting rate)
NIBP	
Patient Population	Adult, Pediatric, Neonate
Method	Oscillometric

Control	Automatic and manual measurements
Auto Intervals	1, 3, 5, 10, 15, 30, 60, 120 min
Displayed Pressures	Systolic, Diastolic, Mean mmHg
Displayer Units	Adult : 40 to 260 mmHg Pediatric : 40 to 160 mmHg Neonate : 40 to 130 mmHg
Systolic Range	Adult : 20 to 200 mmHg Pediatric : 20 to 120 mmHg Neonate : 20 to 100 mmHg
Diastolic Range	±3mmHg
Pressure Transducer Accuracy	Adult : 300 mmHg / Pediatric 300 mmHg / Neonate : 150 mmHg
Redundant Circuit Overpressure Limit	
PRINTER	
Continuous ECG Strip	Real-Time (8 seconds delay)
Auto Printing	Recorder can be configured to print marked event, charge, shock and alarms
Printing Speed	25mm/s
Paper	50mm Width / 40mm Diameters
DATA STORAGE	
Information stored	ECG data, Event, Voice
Internal memory	Yes
Even & ECG record	Yes
Database storage	Yes
External memory card	Yes(SD card)
EXTERNAL LINK	
Data management	Yes
Software	Yes(CU-Expert)
POWER SOURCE	
Type	Lithium Polymer (14.8V 3.1Ah - Rechargeable)
Integral/removable	Removable

Charging method	AC adapter / Car Cigar Lighter Jack / both
AC Power Pack	Output : 18V, 6A
PHYSICAL	
Size	318 X 208 X 355 (W X L X H, mm)
Weight	5kg (with external paddle)
DISPLAY	
Type	TFT Color
Size	7 inch Diagonal (152mm X 91mm)
Resolution	800 X 480 pixels
AUTOMATIC SELF-TEST	
Power on Self-Test	YES
Run Time Self-Test	YES
Manual Self-Test	YES
Periodic Self-Test	Daily / Weekly / Monthly

Certificates

- CE :EU0601401

Packaging & Delivery

- Delivery Lead Time :Within 10 days after the payment is confirmed

Product Image