

CodeManagement MODULE™

For use with LIFEPAK® 20/20e Defibrillator/Monitors



- Waveform capnography
- Wireless connectivity
- Works with any existing 20 or 20e

The Code Management System from Physio-Control helps your hospital improve your preparedness, response and post-event review of codes – helping you not only manage them effectively, but learn from each so that you improve your team's skills on the next.

The CodeManagement Module for the LIFEPAK 20 and 20e defibrillator/monitors is a critical part of this system. It adds technologies to the 20 and 20e that contribute to your hospital's ability to effectively manage codes from preparedness through review:

- Effectively monitor endotracheal tube placement and provide rescuers with real-time feedback on compression efficacy with Oridion's Microstream® continuous waveform capnography monitoring
- LIFENET® Asset wirelessly monitors device data including battery charge status, updates and self-tests
- Wirelessly send patient data to CODE-STAT™ data review software to debrief with the responding team and document quality improvement initiatives

- LIFEPAK 20 and 20e devices with CodeManagement Module provide rescuers with the AHA's recommended rate of 100 compressions per minute with a metronome
- LIFEPAK 20 and 20e devices with CodeManagement Module effectively document event timepoints and manage CPR intervals with a larger, highly visible code clock

The CodeManagement Module can be added to any LIFEPAK 20 or 20e device whether you've owned it for many years or purchased it today, you can add valuable technologies that will improve your organization's effectiveness in critical code situations.

CodeManagement MODULE

SPECIFICATIONS

PHYSICAL CHARACTERISTICS

CodeManagement Module adds 3.6 lb (1.63kg) to LIFEPAK 20/20e defibrillator/monitors.

Size (maximum) of LIFEPAK 20/20e device with CodeManagement Module

Height: 10.0 in (25.4cm)

Width: 10.3 in (26.2cm)

Depth: 11.7 in (29.7 cm)

DISPLAY

With CodeManagement Module, the LIFEPAK 20e defibrillator/monitor displays a minimum of 3.7 seconds of ECG and alphanumeric for values, device instructions, or prompts

Waveform display sweep speed: 12.5 mm/sec for CO₂

POWER

LIFEPAK 20/20e defibrillator/monitor with CodeManagement Module

AC Powered: 100–120 VAC 50/60Hz, 220–240 VAC 50/60 Hz, total power draw less than 150 Volt-Amperes (VA)

Internal Battery Backup: Lithium-ion. Batteries charge while device operates from AC Power.

Low Battery Indication and Message: When the device is unplugged from AC power, it switches to battery. When battery gets low on the CodeManagement Module, the defibrillator indicates with a message to connect to AC power in the status area, and a warning tone occurs.

Battery charge time: <4 hours when device is powered off and AC power is applied

Operating time: A new fully-charged internal backup battery will provide at least 210 minutes of monitoring prior to shutdown.

CO₂ MONITORING

Drift of Measurement Accuracy: No drift in accuracy for at least 6 hours

Respiration Rate Accuracy: 0 to 70 bpm: ±1 bpm
71 to 99 bpm: ±2 bpm

Respiration Rate Range: 0 to 99 breaths/minute

CO₂ Range: 0 to 99 mmHg (0 to 13.2 kPa)
Units: mmHg, %, or kPa

Flow Rate: 42.5 to 65 ml/min (measured by volume)

Rise Time: 190 msec

Response Time: 4.5 seconds maximum (includes delay time and rise time)

Initialization Time: 30 seconds (typical), 10–180 seconds

Ambient Pressure: Automatically compensated internally

Waveform Scale Factors: Autoscale, 0–20 mmHg (0–4 Vol%), 0–50 mmHg (0–7 Vol%), 0–100 mmHg (0–14 Vol%)

CO₂ Accuracy

| | CO ₂ PARTIAL PRESSURE AT SEA LEVEL: | ACCURACY: |
|-------------|--|---|
| (0–80 bpm)* | 0 to 38 mmHg (0 to 5.1 kPa) | ±2 mmHg (0.27 kPa) |
| | 39 to 99 mmHg (5.2 to 13.3 kPa) | ±5% of reading + 0.8% for every 1 mmHg (0.13 kPa) above 38 mmHg (5.2 to 13.3 kPa) |
| (>80 bpm)* | 0 to 18 mmHg (0 to 2.4 kPa) | ±2 mmHg (0.27 kPa) |
| | 19 to 99 mmHg (2.55 to 13.3 kPa) | ±4 mmHg (0.54 kPa) or ±12% of reading, whichever is higher |

*For RR > 60 bpm, to achieve specified CO₂ accuracy, the Microstream® Filterline® H Set for infants must be used.

DATA MANAGEMENT AND TRANSMISSION

The LIFEPAK 20/20e device captures and stores patient data, events (including waveforms and annotations), and continuous ECG and CO₂ waveform records in internal memory.

Wireless data transmission via LIFENET network

WIRELESS NETWORKS

The LIFEPAK 20/20e with the CodeManagement Module supports the following:

- 802.11a, b, g, and n wireless networking standards
- Security types:
 - Open
 - WPA-Personal
 - WPA2-Personal
 - WPA-Enterprise
 - WPA2-Enterprise
- Enterprise authentication protocols:
 - EAP-TLS
 - EAP-TTLS
 - PEAP/MSCHAPv2
- TCP/IP support
 - Internet Protocol Version 4 (IPv4)
 - IP addressing: automatically obtains IP address or a static address may be assigned.
 - DNS servers: automatically obtains DNS server address, or static addresses of the primary and secondary DNS servers may be assigned.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com.



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