Lifecard CF®

- Only 3 electrodes for 3 channels of ECG
- ECG display during hook-up
- 7-day continuous ECG recording
- 12 bit resolution for Crystal clear ECG
Lifecard CF - for the clearest digital ECG

Lifecard CF takes digital Holter recording to a higher level. 12-bit resolution and Ultrasharp™ technology deliver outstanding ECG quality for accurate analysis from the most challenging recording environments.

On-board ECG Display
Lifecard CF has a built in ECG display that allows you to monitor the ECG during hook-up. It even tells you when it has detected each atrial and ventricular pacing spike so you can optimise lead placement.

Pacemaker Spike Detection
Lifecard CF has an extremely sensitive pacemaker detection circuit with excellent noise rejection that operates continuously, with performance better than 10,000 Hz sampled pacemaker detection methods.

The ultra low power design allows it to run from one AAA battery to acquire 7 days of continuous ECG.

The high resolution digital recorder
Lifecard CF uses 12-bit technology to bring you Ultrasharp™ ECGs. Even the most subtle atrial arrhythmias and atrial pacing phenomena can be clearly seen in 12-bit ECGs. P-waves are rounded, not squared off, and details like notched P-waves are precisely reproduced. 12-bit ECG can make the difference between confident diagnosis and an inconclusive Holter test. Some of the arrhythmias that show up clearly in 12-bit ECG could be missed altogether without it.

7-day continuous ECG capability
Diagnose arrhythmias before they become an everyday occurrence.
Lifecard CF can record up to 7 days of continuous ECG which can be quickly scanned using Lifescreen software to find the most appropriate day for Holter analysis. That 24-hour period can then be analysed using any of our current Holter scanners.

7-day recording enables positive early diagnosis of patients before their arrhythmias become an everyday occurrence.
Comfortable patients - better recordings

Lifecard CF’s patented 3-channel 3-electrode hook-up improves patient comfort, which is very important for 7-day recordings. The splashproof design and disposable carrying pouch (see picture opposite) make it practical and convenient to wear the device under the clothing with short cables. This minimizes electrode disturbance and improves ECG quality, and it gives the patient the freedom to change clothes and perform their daily routine.

Never lose a recording again

Lifecard CF is designed to prevent tampering by the patient. Even if the battery or CF card is accidentally removed, when replaced the recording continues as normal, leaving a gap in the ECG and not a flat line.

A back-up rechargeable battery maintains the clock and user settings for over three months when the recorder is not being used.

The latest technology in a rugged, splashproof enclosure

Lifecard CF benefits from all the latest improvements in CompactFlash memory technology. Removable cards allow future memory upgrades for today’s devices. Using multiple cards allows quick transition to the next patient, and ECGs recorded on cards can easily be sent to a remote location for analysis.

Rugged

Lifecard CF is tested to withstand a 3 foot drop onto concrete and still function perfectly.

Splashproof

A new Lifecard CF is rated to IPX7 (immersion in water) when the seals are new, so you can be confident that it will be splashproof for years to come.

Voice recording: No PC necessary at hook-up

If no PC is available during hook-up, a voice recording of the patient’s name and ID can be stored on the card, so hook-ups can be done anywhere. With multiple cards, there is no need to access a PC before re-using the recorder – just insert a fresh card and make a voice recording.

Data Management & Networking

Lifecard CF recordings integrate with the Del Mar Reynolds Cardiology Information Management System. CardioNavigator® (C-NAV) provides one central platform and core database for all ECG data and links to the Hospital Information Management System (HIS).

Upload patient details directly from the HIS via C-NAV into the Lifecard CF to save time and reduce transcription errors. Completed recordings can then be downloaded to any terminal on the C-NAV network for analysis on any networked system.

All Holter data, including raw ECG and reports, are stored in the same central location as these other C-NAV integrated procedures:

- Resting ECG
- Stress Testing
- ECG Event Recording
- Ambulatory BP
Additional Features

- Pacemaker Spike Detection
- **Single AAA** alkaline cell required
- Splashproof
- Patient ID storage (**voice recording**)
- **Lightweight** and comfortable to wear
- Time and Date Recording
- Patient event button
- Large Digit LCD Clock Display
- **On board ECG hook up monitor**
- Belt Clip standard on long length patient cables
- **7 Day Capability** with Lifescreen screening system for increased diagnostic yield

Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>96 x 57 x 18 mm (3.8 x 2.2 x 0.7 inches)</td>
</tr>
<tr>
<td>Weight*</td>
<td>118 g (4.2 oz)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>One AAA alkaline or rechargeable battery (NiMH)</td>
</tr>
<tr>
<td>Memory</td>
<td>90 MB removable CF card</td>
</tr>
<tr>
<td>Procedure options</td>
<td>3 or 6 electrode, 3 channel 48 hr, 4 electrode, 2 channel 48 hr, 2 electrode, 1 channel 7 day OR 3 or 4 electrode, 2 channel 7 day</td>
</tr>
<tr>
<td>Data compression</td>
<td>None in 48 hour recording. In 7 day mode: 10 µV max. error compressing MIT-BIH databases. Exceeds EC38 requirements. 3 channel 7 day uncompressed recording (384 MB) is available to special order.</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>10 mV</td>
</tr>
<tr>
<td>Amplitude Resolution</td>
<td>2.5 microvolt (0.0025 mV)</td>
</tr>
<tr>
<td>Sampling Rate</td>
<td>1024 samples per second</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>0.05 Hz to 40 Hz</td>
</tr>
<tr>
<td>Pacemaker Pulse Detection</td>
<td>Channels 1 and 2</td>
</tr>
<tr>
<td>Pacemaker Pulse Sensitivity</td>
<td>7 mV</td>
</tr>
<tr>
<td>Calibration</td>
<td>Automatic</td>
</tr>
<tr>
<td>Signal to Noise Ratio</td>
<td>70 dB</td>
</tr>
<tr>
<td>Common Mode Rejection</td>
<td>&gt;80 dB at 50/60 Hz</td>
</tr>
<tr>
<td>Input impedance</td>
<td>&gt;5 Mohm</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: 0º to +45º C, Storage: -20º to +65ºC</td>
</tr>
</tbody>
</table>

*weight includes battery, patient cable and Compact Flash Card

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