GE Healthcare

MAC 5500 ECG Diagnosis system

The MAC 5500 system offers the sophistication required for advanced ECG applications, while its ease of use extends this level of performance to the broadest range of users possible. And, it's part of the complete GE suite of networked, non-invasive testing solutions designed to maximize efficiency and productivity in hospitals, clinics, office based practices and research institutes.

Instrument Type:

| mstrument rype. | | |
|--|--|--|
| Microprocessor augmente | ed automatic electrocardiograph; | |
| 14-leadwire acquisition with programmable lead configuration | | |
| Processing | | |
| ECG Interpretation: | Marquette 12SL ECG Analysis Program for Adults and Pediatrics | |
| Computerized | 15-lead analysis includes measurements | |
| Measurements: | of user-selectable additional 3 leads | |
| Optional: | Hi-Res Late Potential Analysis and P-Wave Signal – Averaged ECG | |
| Additional ECG Function: | Vectorcardiography | |
| ECG Analysis Frequency: | 500 samples/second (sps) | |
| ECG Storage: | 200 ECGs in internal memory | |
| External Archiving: | Secure Digital card | |
| Digital Sampling Rate: | 4,000 samples/second/channel | |
| Pre-Acquisition: | Provides 10 seconds of instantaneous ECG acquisition | |
| Dynamic Range: | AC Differential ± 5mV, DC offset ±320 mV | |
| Resolution: | 4.88 μV/LSB @ 250 sps, 4.88 μV/LSB @ 500 sps | |
| Frequency Response: | -3 dB @ 0.01 to 150 Hz | |
| Common Mode Rejection: | >140 dB (123 dB with AC filter disabled) | |
| Input Impedance: | >10M Ω @ 10 Hz, defibrillator protected | |
| Patient Leakage: | <10 µA | |
| Pace Detect: | Orthogonal LA, LL, and V6; 750 μV @ 50 μs | |
| Special Acquisition | Disconnected lead detection, | |
| Functions: | electrode impedance, excessive, AC noise, baseline wander and muscle tremor messages | |
| Heart Rate Meter: | 30 to 300 BPM ±10% or 5 BPM, whichever is greater. Heart rates outside this range will not be displayed. | |
| Communications | | |
| MUSE Cardiology Informa | tion System compatible | |
| Infra-Red | | |
| Serial Cable | | |
| Internal modem/fax | | |
| Optional: | Remote Retrieval (Remote Query), | |
| | Wireless (requires additional MUSE software and installation): | |
| | - MobileLink (using WEP security protocols and, in some countries, | |

Cisco LEAP authentication/security)



| Communications cont. | | |
|---|---|--|
| LAN (requires additional MUSE communications software and installation) | | |
| | Communication with MUSE over LAN thru internal RJ-45 jack | |
| Display | | |
| Display Type: | 10.4 in (264 mm) diagonal graphics backlit AM LCD (color optional) | |
| Display Resolution: | 640 x 480 pixels with waveform enhancement | |
| Display Data: | Heart rate, patient name, ID, clock, waveforms, lead labels, speed, gain and filter settings, warning messages, prompts, and help messages | |
| Writer | | |
| Writer Technology: | Thermal dot array | |
| Writer Speeds: | 5, 12.5, 25, & 50 mm/s (same as displayed) | |
| Number of Traces: | 3, 6, 12, or 15, user selectable (same as displayed) | |
| Writer Sensitivity/Gain: | 2.5, 5, 10, 20, 10/5 (split calibration) mm/mV (same as displayed) | |
| Writer Speed Accuracy: | ±2% | |
| Writer Amplitude Accuracy: ±5% | | |
| Writer Resolution: | Horizontal 1000 dpi @ 25 mm/s, 200 dpi vertical | |
| Paper Type: | Thermal, Z-fold, perforated, fan fold, 300 sheets/pack | |
| Paper Size: | A Size: 214.63 mm x 280 mm | |
| | A4 Size: 210 mm x 297.5 mm | |
| Keyboard | | |
| Туре: | Sealed elastomer with soft function keys, alphanumeric keys, writer controls, and TrimPad cursor controls | |
| Electrical | | |
| Power Supply: | AC or battery operation | |
| Voltage: | 100 to 240 VAC +10, -15% | |
| Current: | ►0.5A @ 115 VAC, 0.3A @ 240 VAC, typical | |
| Frequency: | 50 to 60 Hz ±10% | |
| Battery Type: | User replaceable, 18V @ 3.5 AH $\pm 10\%$ rechargeable NiMH | |
| Battery Capacity: | 100 single page reports, (typical) or 6 hours continuous display (without printing) | |
| Battery Charge Time: | Approximately 4.5 hours from total discharge (with display off) | |



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| Vectorcardiography | | | |
|---|--|--|--|
| Report Formats: | Vector loops of component vectors (P, QRS, ST-T) | | |
| Sensitivity: | 20, 40, 80, or 160 mm/mV | | |
| Time Resolution: | 2 ms | | |
| Hi-Res Late Potential | Analysis and P-Wave Signal- | | |
| Averaged ECG | | | |
| Frequency Response/Input: -3 dB @ 0.01 and 250 Hz | | | |
| Frequency Response/ | Upper Limit: 250 Hz | | |
| Output: | Lower Limit: 0.01, 25, 40, or 80 Hz | | |
| Sensitivities: | | | |
| Raw Data Template: | 20 mm/mV | | |
| Average Beat: | 20 mm/mV and 50 mm/mV | | |
| Filtered Signals and Vector Magnitude: | 1 mm/µV | | |
| Analysis Sampling Rate: | 1,000 samples/second/channel | | |
| Digital Sampling Rate: | 4,000 samples/second/channel | | |
| High/Low Pass Filters: | Special filter using Fast Fourier Transform (FFT) | | |
| ADC Resolution: | 1.22 μV/LSB | | |
| Analysis Resolution: | 0.1525 μV/LSB | | |
| Physical Specification | | | |
| Height: | 9.4 cm (<mark>3.7 in)</mark> * with display closed | | |
| Width: | 38.1 cm (<mark>15 in)</mark> * | | |
| Depth: | 35.1 cm <mark>(13.8 i</mark> n)* | | |
| Weight: | Approximately 6.8 kg (15 lbs)* including battery without paper | | |
| Environmental Specifications | | | |
| Temperature: | | | |
| Operating: | 10° to 40° C (50°to 104° F) | | |
| Transport/Storage: | –40° to 70° C (–40°to 158° F) | | |
| Humidity: | | | |
| Operating: | 20% to 95% RH non-condensing | | |
| Transport/Storage: | 15% to 95% RH non-condensing | | |
| Pressure: | | | |
| Operating: | 700 to 1060 hPA | | |
| Transport/Storage: | 500 to 1060 hPA | | |
| Trolley Specifications | | | |
| Dimensions: | 99 cm (39 in) | | |
| Height: Width: | 54 cm (21 in) | | |
| Depth: | 28 in (72 cm) | | |
| Height with acquisition | | | |
| module holder | 134 cm (52.5 in) | | |
| Weight: | 25 kg (55 lbs.) | | |
| Magnetic Card Reade | 5 | | |
| Character Set | ANSI/ISO ALPHA alphanumeric characters | | |
| | | | |
| | and ANSI/ISO BCD (subset of ASCII (ISO 646 IRV:1991)) | | |

| | M7710 |
|---------------------------------|---|
| Dimensions: | Page 2 of 2 |
| Height: | 28 mm (1.17 in) |
| Length: | 100 mm (3.94 in) |
| Width: | 34 mm (1.34 in) |
| Temperature Range Operating: | 10° C to 40° C (50° F to 104° F) |
| Humidity: | 10% to 90% humidity |
| Agency Conformance: | Complies with FCC Class A. |
| CE: | The system has been tested to and con- forms with the provisions within 89/336/EEC, Electromagnetic Compatibility directive (EMC) |
| Barcode Scanner Spec | |
| Symbologies | Code 39 (extended), PDF-417, Code 128 |
| Dimensions: | |
| Height | 15.2 cm (6.0 inches) |
| Length | 13.5 cm (5.3 inches) |
| Width | 7.9 cm (3.1 inches) |
| Light Source | 630 nm visible red LED |
| Temperature Ranges: | |
| Operating | 0° C to 50° C (32° F to +122° F) |
| Storage | -20° C to +60° C (-4° F to +140° F) |
| Humidity | 0 to 95% non-condensing |
| Mechanical | Operational after 25 drops from 1.53m (5 feet) to concrete |
| Vibration | Withstands 5G peak from 20 to 300 Hz |
| ESD Sensitivity | 15 kV to any external surface |
| Agency Compliance | FCC Class B, EMC Class B, CE Low Voltage Directive, EN60825-1, IEC60825-1, LED Safety: Class 1, UL, cUL, TÜV Certified to N60950, C-Tic |

Certification

UL classification, CSA classification, CE marking, CB certificate

Warranty Standard warranty is one year

Ordering Information

Available in: Simplified Chinese, Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Japanese, Norwegian, Polish, Spanish and Swedish.

Visit gehealthcare.com or contact your local GE Healthcare representative. Accessories available from www.gehealthcare.com

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