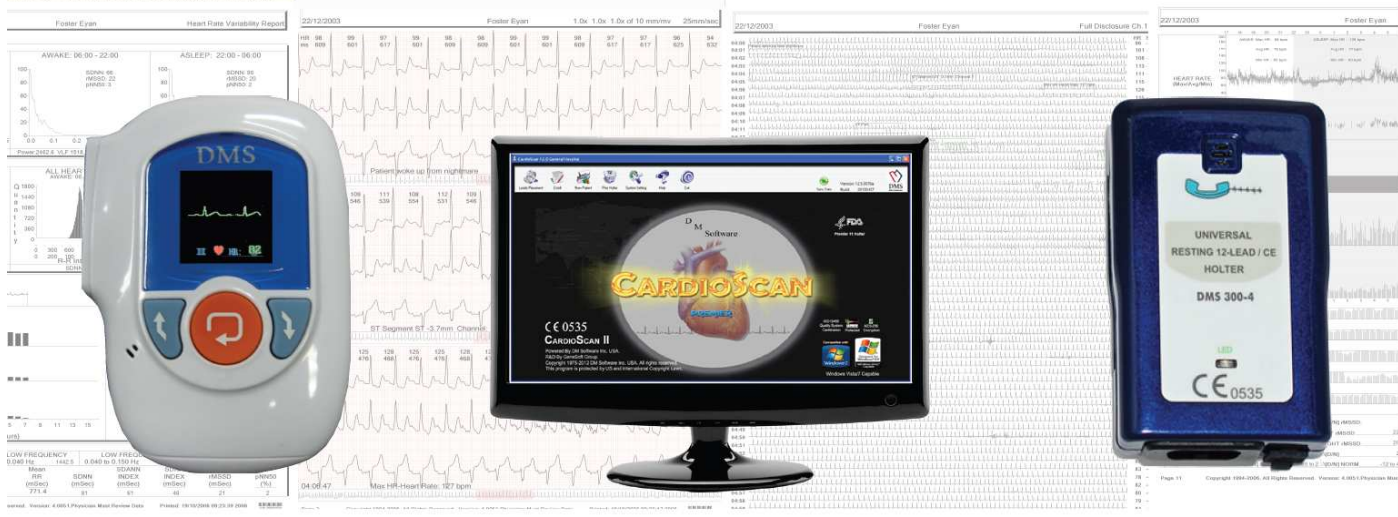


CardioScan
Holter ECG Systems

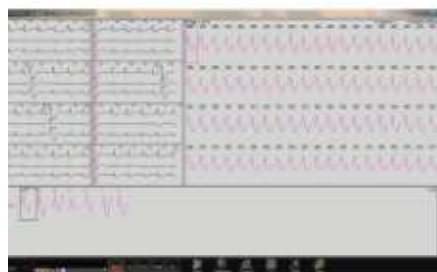
[illegible]

The collage features several elements related to medical data analysis:

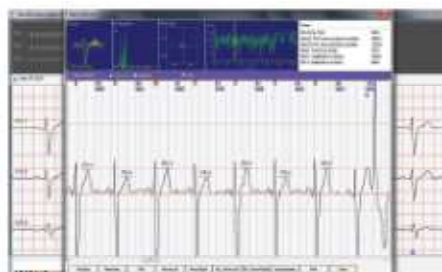
- ECG Waveforms:** Multiple heart rate monitoring traces are visible, showing standard P, Q, R, and S waves. One trace is labeled 'MR 57b: 1'.
- Bar Chart:** A small green bar chart is located in the upper right quadrant.
- Table:** A table with columns labeled 'Systolic', 'P1', 'P2', 'S1', 'S2', 'QT', 'MS min (25.4)', 'MS max (25.4)', 'Mean (25.4)', 'SD (25.4)', 'Min (25.4)', 'Max (25.4)', 'SD (25.4)', 'Min (25.4)', 'Max (25.4)', 'SD (25.4)', 'Min (25.4)', 'Max (25.4)', 'SD (25.4)'. The rows contain numerical data.
- MS Logo:** A large circular logo on the left side contains the letters 'MS' and 'ware' below it. The logo has a blue and white color scheme with stars.
- Text:** The word 'Experience' is written in a large, bold, black font across the center of the collage.



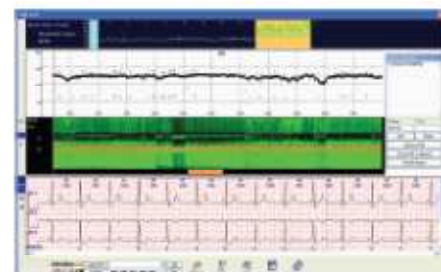
CardioScan Premier 12 Software Screen Views



VE, SVE, & Aberrant Templates



T-Wave Alternans



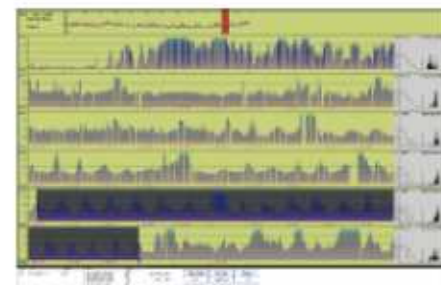
A-Fib Burden



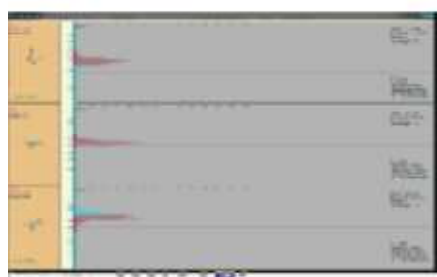
QTc - Medication



Ventricular Escape
Bundle Branch Block



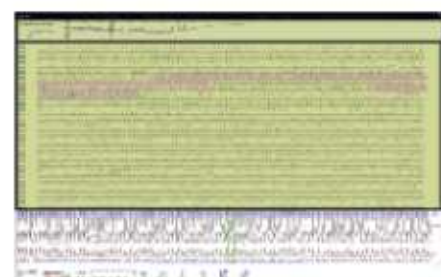
HRV and Sleep Apnea



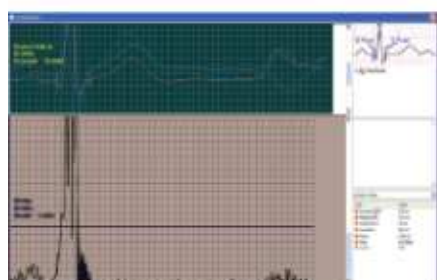
Premier ST - Ischemia
(3 & 12 Lead)



Pacemaker
10, 240 Samples



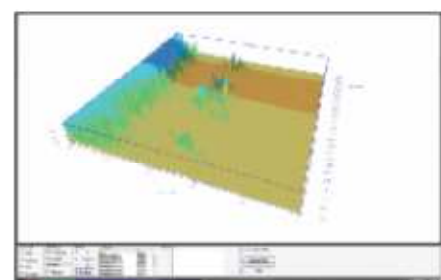
Color - Coded
Full Disclosure



SAECG Late Potentials
& Vectorcardiography



Revolutionary
Cardiac Event



Autonomic
Nervous System

CardioScan Premier 12 Holter Software Features

Features

Unique

- Real-time ECG monitoring during hospital in-patient Holter ECG monitoring.
- Out-patient multi-day Holter monitoring has 24-Holter file transmitted from patient home to hospital or cardiology office each 24-hours with patient's internet.
- For the first time in Holter history, because of daily internet Holter transfers, the physician now knows how many days a Holter test should be.
- DMSSatellite Internet Holter allows hospital or cardiology office to process Holter ECG's immediately from far-away remote facilities.
- One (1) to Thirty (30) day Holter ECG recordings, with 4GB of ECG memory.
- The same recorder is a 3-Lead Holter; is a 12-Lead Holter; is a Cardiac Event Transtelephonic ECG.
- On-going ECG analysis during Holter recording for quick reporting of asymptomatic events.
- The very best multi-day A-Fib monitoring and reporting.
- Easy and quick editing of multi-day Holter ECG recordings.
- Pacemaker spike editing on channel 4 at a true 10,000 samples per second for the very best pacemaker spike detection and reporting.
- Autonomic Nervous System with HRV, Poincare/Lorenz Plots, and Deceleration Capacity.
- Investigational FCG (Frequency CardioGram) as a potential for locating an ischemic injury without the need for elevated heart rate during the Holter recording.
- QTc monitoring for elongated QT interval caused by allergy, psychotic, and arrhythmia medications.
- Phone and/or internet immediate transmission of symptomatic and asymptomatic ECG events from ambulatory outpatient.
- Satellite Holter program for remote scanning of Holter ECG recordings. 24 hour ECG satellite/transferred each day from ambulatory outpatient to Holter processing PC.
- Patient home PC daily monitoring. Transmit 100% ECG Holter recorder data from any remote PC over the internet to the processing PC.
- Pacemaker program: A-Paced, V-Paced, AV-Paced, BiV-Paced, Fusion, and Intrinsic Beat-to-Beat trends.
- Autonomic Nervous System (ANS); Sympathetic and Parasympathetic.

Analysis

- The world's best selling Holter analyzer of arrhythmias (VE, SVE, Aberrant, Bigeminy, Trigeminy, Multi-focals, Pairs, Runs, Sustained, Brady, Tachy, Bundle Branch Block, Ventricular Escape, etc.); 3 & 12 Lead ST, Pauses, Blocks; R on T, QTc, QTd; 1-week A-Fib Burden; and T-Wave Alternans.
- A-Fib (and A-Flutter) detection and easy editing for up to 30 days, with A-Fib Burden for each day. The most complete A-Fib Burden data. Time Domain and Spectral Heart Rate Variability, with Poincare plot ECG retrievals.
- QT and QTc monitoring for Time-scale QTc/Medication interaction.
- ST Analysis of 3 or 12 Lead Holter, with Delta and Absolute analysis. Visually verify every minute in 24-hour ECG in less than 20 seconds. Seeing is believing.
- Respiration analysis and body position monitoring during overnight Holter ECG monitoring.
- Sleep Disorder analysis during overnight ECG monitoring. 24 hour Sleep Apnea indicator with detection and display of SAS episodes.
- T-Wave Alternans (TWA) analysis that shows amplitude of each T-Wave, and enlarged ECG of each episode of TWA.
- SAECG analysis at 1,024 Hz and 16-bit resolution, with both Time Domain and Frequency analysis.
- Vectorcardiography (VCG) analysis of Holter ECG.
- Standard Resting 12-Lead review menu from any time period in 12-Lead Holter ECG recordings.
- HR Deceleration Capacity (plus Acceleration Capacity).
- HRV Analysis; Spectral Frequency and Time Domain.

Functions

- 24-hour ECG Full Disclosure color-coding for each individual beat to accomplish immediate visual verification.
- 24-hour Histograms of Heart Rate, 3 & 12 Lead ST, VE, SVE, V-Runs and Sustained V-Tach, Pauses, N-N, SDNN, Power, QTc, A-Fib rate changes with min & max HR each minute, and T-Waves (for T-Wave Alternans).
- ST Depression or Elevation review of any ECG lead for 24 hours (1440 minutes) in less than 20-seconds. Seeing is Believing!
- EMR database outputs, SQL, HL7, DICOM, PDF.
- Data outputs into Holter research study computers.
- Minute-by-minute printed histograms of multi-focal ventricular ectopic beats.
- Auto-sorting of multi-focal ventricular ectopics.
- Auto-sorting of V-Tach by either length of time or by heart rate.
- Auto-sorting of Pauses by time duration. Select a different time length, and re-analysis for 24-hours occurs in less than 4-seconds.
- Auto-sorting of PVC's by prematurity.
- Auto-sorting of PAC's by prematurity.
- Customized Holter reports with desired Conclusion formats, and Header logo.

Multi-Day Holter ECG Recorders



Actual Size

Model: DMS 300-4L

Multi-Parameter: ECG, Respiration, ABP, and Body Position

- ECG, Respiration, ABP, and Body Position monitoring.
- Memory transfer by USB cable and/or mini Sandisk flash memory card.
- 2-3 day Holter recording.
- 3 and 12-Lead Holter ECG.
- 3-Lead ECG by 3, 4, or 7 electrode cable.
- 12-Lead ECG by standard 10 electrode cable, or Frank XYZ.
- Cardiac Event symptomatic transtelephonic ECG.
- Separate SAECG file at 1,024 Hz and 16-bit.
- Receives ABP signal for combo ECG/BP report.
- LCD: Real-time ECG at any time, heart rate, time clock, battery power status, ECG cable status, and respiration rate.
- Coordinated input from DMS ABPM.
- Power supply: 1 AAA alkaline battery.
- HDMI for artifact isolation.
- Memory \geq 4GB
- High speed USB interface.
- Sample rate: read 4096Hz, write 128Hz.
- Implantable Cardioverter-Defibrillator (ICD) safe Lead cables (Optional).
- Digital reliability with 2 year warranty.
- 16 bits A/D resolution.
- Frequency response 0.05 to 150 Hz with 4GB memory.



Actual Size

Model: DMS 300-4

Daily Holter ECG Home Monitoring

- More accurate day-to-day ECG monitoring than hospital Telemetry.
- Transfer all 100,000 daily ECG beats with patient's internet PC.
- Know what's really happening with the cardiac medication treatment.
- Know what's really happening with the post-angioplasty patient.
- Know what's really happening with the A-Fib ablation patients.
- The capability to immediately respond to abnormal ECG.
- Better patient care with significant hospital cost-savings.
- Send the patient home and get a more accurate ECG profile.
- Patient is not confined to the home environment, go anywhere.
- Obsoletes all current Holter ECG systems.
- Multi-Day Holter ECG's are now reimbursable.
- Miniature size.
- Weight: 3 ounces.
- Power supply: 1 AAA alkaline battery.
- 3-lead ECG: use 4 electrode ECG cable.
- 12-lead ECG: use 10 electrode ECG cable.
- HDMI for artifact isolation.
- 4 GB ECG memory, 1 to 30 day recordings & home transmissions.
- CE certification and FDA 510(k).
- Implantable Cardioverter-Defibrillator (ICD) safe Lead cables (optional).
- High speed USB interface.
- Digital reliability with 2 year warranty.
- 300-4 Recorder has 4-GB memory.
- 300-4 has an ECG sample rate of 4,096/second.
- 300-4 records either a 3-lead or 12-lead ECG.
- Memory storage is all ECG beats for up to 30 days.
- 300-4 works in conjunction with the Home Satellite software.



Actual Size

Model: DMS 300-4A

Combo 3 and 12 Lead Holter Recorder

- Isolation USB playback cable to view ECG wave in real-time.
- Connect Holter recorder to Smart Phone or PDA by USB playback cable to view & print ECG wave in real-time.
- Transtelephonic ECG output.
- 3 & 12 Lead ECG acquisition function.
- Digital reliability with 2 Year Warranty.
- High speed USB interface.
- Digital reliability with 2 year warranty.
- Input circuit current: $\leq 0.1\mu A$.
- Input impedance: $\geq 2 M\Omega$.
- Noise level: $\leq 15\mu Vp-p$.
- Polarizing voltage: Adds $\pm 300 mV$ the co-current polarizing voltage, the sensitivity shift is not more than $\pm 5\%$.
- Frequency Response: $0.05Hz \sim 100Hz (+0.4dB -3.0dB)$.
- CMRR: $> 60 dB$.
- Standard 12 Leads (10 Electrode Lead wires).
- Standard 3 Leads (4 Electrode Lead wires).
- Sampling rate: read 4096Hz, write 128Hz.
- Memory: 4GB
- Power supply: 1 AAA alkaline battery.
- Dimensions: 88mm x 55mm x 21mm.
- Weight: ≤ 100 grams.
- HDMI for Artifact Isolation.
- CE and FDA Marketing Approvals.
- Defibrillator safe Lead cables (optional).
- 3 Lead and 12 Lead recorder.
- 3 Lead for 1-7 day recordings.
- 12 Lead for 1-4 day recordings.
- 4096 Hz sample rate.
- Holter recorder's playback time is less than 30 seconds per day.
- Event button to record patient symptomatic events.



Actual Size

Model: DMS 300-3A

3-Lead Holter ECG Recorder

- Multi-Day Holter recorder up to 7 days.
- Standard 3 channel ECG (5 or 7 Lead wires).
- Sampling rate: read 4096Hz, write 128Hz.
- Memory: 4GB
- Dimensions: 88mm x 55mm x 21mm.
- Weight: ≤ 100 grams.
- HDMI for Artifact Isolation.
- CE and FDA Marketing Approvals.
- Defibrillator safe Lead cables (optional).
- High speed USB interface.
- Holter recorder's playback time is less than 30 seconds per day.
- Power supply: 1 AAA alkaline battery.
- Event button to record patient symptomatic events.
- Isolation USB playback cable to view ECG wave in real-time.
- Input circuit current: $\leq 0.1\mu A$.
- Input impedance: $\geq 2 M\Omega$.
- Noise level: $\leq 15\mu Vp-p$.
- Polarizing voltage: Adds $\pm 300 mV$ the co-current polarizing voltage, the sensitivity shift is not more than $\pm 5\%$.
- Frequency Response: $0.05Hz \sim 60Hz (+0.4dB -3.0dB)$.
- CMRR: $> 60 dB$.
- Digital reliability with 2 Year Warranty.



Actual Size

Model: DMS 300-3P

Pacemaker Holter Recorder

- Multi-Day Holter Recorder 1-3 day recordings.
- Standard 3 Channel ECG (5 or 7 Electrode)
- 10, 240Hz sample rate for pacer spike channel.
- 4096Hz sample rate for ECG channels.
- Less than 30 seconds to download recorder data.
- Power supply: 1 AAA alkaline battery.
- Advanced pacemaker spike detection of all amplitudes.
- Independent 4th channel solely devoted to pacemaker spikes.
- Dimensions: 88mm x 55mm x 21mm.
- Weight: ≤ 100 grams.
- HDMI for artifact isolation.
- Memory $\geq 4GB$.
- High speed USB interface.
- Digital reliability with 2 Year Warranty.

Holter Satellite System

Introduction

The DMS Satellite Software was designed to speed up the process of analyzing patient ECG data from remote locations or the patient's home, by transferring the data directly over the internet.

How It Works

- The Satellite Server serves as a base station for all computers to connect to.
- The Satellite Explorer is used by technicians in a service center or hospital to analyze patient data.
- The Satellite Client is used by a doctor's office or hospital to send patient Holter data to the Server, and receive edited Holter files from the Server.
- The most significant advancement in Holter ECG technology in the last ten years.
- Patients can send recorded ECG data directly to Server from their own home PC via the internet.

Satellite Server

- Usually located in a hospital or scan center, the Server PC should be a dedicated PC in order to maintain stability and security.
- Receives and sends patient data from the Client and Explorer computers.
- Unique internet program, designed solely for the cardiology needs of modern Holter ECG monitoring.

Satellite Explorer

- Installed on a typical PC station.
- Used by Holter scanning specialists to download patient data from the Server, then to upload it back when analysis/editing is complete.
- Usually located inside the same hospital or scan center, and on the same local network as the Server computer.

Same Day Results

- Holter ECG reports provided each day to physicians from continuous 1 to 30 day Holter recordings.
- Each day the physician sees the Holter ECG results from the ambulatory outpatient monitoring.
- For the first time, the physician now knows the exact number of days to continue the Holter test.

Specifications

- 32 Bit or 64 Bit
- Operating System: Windows XP, Vista, Win 7
- CPU: ≥1G Hz
- Hard Disk: ≥40G
- RAM: ≥256M
- Monitor Resolution: 1024×768
- Security Key: USB SuperPro
- Printer: Laser printer or ink-jet printer, black & white or color

