Rembrandt® is a powerful, flexible and easy to use sleep diagnostic system for both clinical and research applications. The system of choice in hundreds of locations worldwide, Rembrandt is your reliable partner for everything you want to do in sleep. Available in stationary, portable and ambulatory configurations, a comprehensive array of tools helps you perform any type of sleep study including OSAS, pediatric, insomnia and cardiovascular investigations. Rembrandt uses the proven Embla and Monet systems and can perform high-end or routine studies with software packages adapted to your needs.

- Rembrandt uses state-of-the-art amplifiers and sensors in a wide range of recording systems offering from 5 to 60 channels for any type of physiological signal and clinical protocol.
- Perform routine or advanced PSG and MSLT in the sleep center or at home using stationary, portable or ambulatory configurations. PSG in research is supported by advanced calculations, export and EDF-format facilities. Amplifiers can be combined with specific sensors and specialized analysis. Integrate with DaVinci neurodiagnostic software to configure a powerful PSG/EEG system.
- Medcare provides a complete sensor line to support trouble free recordings while the flexibility and universality of the amplifiers also allow you to use sensors from other manufacturers.

### Efficient and Customizable

Rembrandt ergonomically adapts to each user and task to optimize your daily work. The software can be customized to suit your individual working environment and user interface. Signals, overviews, hypnograms or spectral data can be adjusted to user and task-specific needs. This means you can, for example, switch quickly from a routine task to a scientific working environment. System Managers and reviewing tools also let you organize and access information more easily.

- Quickly and easily start a new study or manage your studies
- Store your individual working environment with user and task-specific windows
- Predefine your recording protocols and easily add signals to your standard PSG protocol
- Save time and increase quality with computer-assisted impedance check, calibration of bio-signals, virtual look-back review, and manual as well as intelligent analyses during recording
- Use the Events List to manage and record all events during the night and access any part of the recording with a single mouse click
- Dynamic review tools that include montage reformatting, reference switching, refiltering, and page comparison
- Keep comprehensive patient files and recording devices organized and available with Rembrandt Manager

### Powerful and Versatile Analysis

A multitude of intelligent, signal analyzers based on the latest knowledge in the field of sleep make your work easier and help save valuable time.

- Besides the conventional analysis methods like respiratory parameters, sleep stages, limb movement analysis, heart rate analysis and arousal analysis, Rembrandt puts more sophisticated analyses at your disposal
- Spectral, Esophageal Pressure, Pulse Transit Time, Respiratory Mechanics Instability, Phase and Bruxism analysis options
- Customize the analysis to specific facility, clinical and research needs with-user definable computer-assisted analysis criteria
Use the NiteAssistant

NiteAssistant™ provides accuracy and quality control while dramatically increasing the efficiency of split-night studies. NiteAssistant also lets you control how computer-assisted you would like the study to be. Technicians can still edit events and turn the detectors on and off.

- Intelligent real-time control of the channels being acquired
- Assistance in determining when to begin CPAP/Bi-Level intervention
- Keeps track of your pre-established criteria and notifies you when CPAP/Bi-Level pressures need adjustment
- Generates several reports including Data Summary and Pressure Table

Improve Quality Management

In addition to computer-assisted analysis for quality management, Rembrandt offers:

- Easy comparison of sleep stage scores between two scorers
- Score comparison of clinical events such as apnea
- Simplify blind scoring, single blind or double blind
- Simple statistics like percentage agreement or detailed statistics like Kappa or Z scores
- Quality check the analysis settings

Pediatric Sleep Studies

Rembrandt offers pediatric sleep study solutions. Choose from a wide range of Medcare amplifiers to use in combination with pediatric sensors and a detailed behavior analysis using fully synchronized digital video.

- Infant sleep staging, sigh analysis, sensitive and lightweight XactTrace respiratory inductance plethysmography analysis, phase analysis, periodic breathing, pH, CO2 analysis by either end tidal CO2 or transcutaneous CO2 and blood pressure analysis
- Clearly visualize the phase relationship between thorax and abdomen effort with a dynamic phase plot and Medcare's Respiratory Mechanics Instability (RMI) parameter
- Ensure that the effects of development can be easily taken into account with adult and infant staging in one system

Flexible Reporting

Rembrandt features extensive and flexible reporting. Get the results you need with completely customizable reports. Events and indexes can be reported in combination with sleep stages and body position.

- Add graphical representations of the analysis results or traces from the night summary of the recording
- Customize your reports by adding the name and logo of your institute
- Easily export analysis results to Excel for further processing
Embla N7000 with Communication Unit and Patient Unit

Available in Different Configurations

Rembrandt is available in a Master or Artist configuration to let you fit your software package to your exact needs.

**Artist Series** - Tailored to organizations that want to optimize efficiency in routine tasks. The full functionality of a modern sleep clinic is available to you with the most straightforward operation that requires very little training.

**Master Series** - Provides the scientifically oriented professional with the ideal working tool to study and analyze even the most complex problems with ease.

Some of Rembrandt's modules and analysis features are optional additions to the standard system.

Medcare Recording Systems

Medcare Recording Systems offer a high degree of flexibility and signal quality to meet the highest demands of clinical work and research and are available in a variety of configurations. Signal quality is ensured with state-of-the-art digital acquisition, filtering and storage technology, including anti-aliasing filters and integrated 50Hz and 60Hz notch filters.

**Embla N7000** - Ergonomically designed full polysomnography system, offering extended EEG capabilities, up to 60 channels

**Embla S7000** - Designed for the dedicated high-performance sleep center, up to 40 channels

**Monet** - Ambulatory system with up to 27 channels

Complete Sensor Technology

Medcare offers a complete line of sensors and study accessories including nasal pressure, thermistry, up to four site esophageal pressure; body position and snoring to help you perform a wide variety of studies. Medcare also develops new cutting-edge sensor technology that increases accuracy and ease in the study environment. Medcare's XactTrace™ belts utilize inductance plethysmography to deliver unmatched effort trace accuracy.

Business Management Software

Medcare's Enterprise™ System is an integrated business management solution for clinical sleep environments. You can schedule studies for a single facility or multiple networked facilities, provide centralized management for your reports and documents, track study statistics, produce the reports you need for your sleep center quality assurance and perform extensive queries on the subject population that resides within the Enterprise database.

Have the Support You Need

Medcare supports you every step of the way. Trust in Medcare's dedicated support team and multilevel Protection Plus program including a 1 year warranty with up-time guarantee. System installation and training of your staff is done in an efficient way, so that your sleep center is up and running with minimal disruption. Staff development and other education resources are also available from Medcare.
Advanced Reporting

**Acquisition Modules**
- Embia N/S7000
- Monet
- Audio
- Video

**Report Modules**
- Polysomnography
- CPAP
- Sleep Stage Summary
- Respiratory Events
- Arousal Events
- Cardiovascular Events
- HRV
- Pulse Transit Time Events
- PLM
- Split Night
- MSLT
- Scoring Comparison
- Pediatric
- Bruxism
- Esophageal Pressure
- Gastro-Esophageal Reflux
- Customized Reports
- Word Reporting

**Online / View Modules**
- Virtual Look-Back Review
- Bio Calibration
- Real-Time Hypnogram
- Real-Time Analysis
- Impedance Check
- Signal Trends
- Event Trends
- Signal Windows
- Overview Windows
- Spectral Windows
- Report Windows
- Phase Plots
- Clickable Event List

**Analysis Modules**
- Arousal Analysis
- Arousal Associations
- Cardiovascular Analysis
- Heart Rate
- R-R Intervals
- Tachy/Brady Cardiac
- Pulse Transit Time
- Esophageal Pressure Analysis
- Respiratory Analysis
- Apnea/Hypopnea
- Desaturation
- Snore
- Flattening
- Respiratory Mechanics Instability
- Associations
- Sleep Stage Scoring
- Sleep Staging
- Sleep Spindles
- Eye Movements
- PLM Analysis
- LM
- PLM Associations
- Body Position Analysis
- Bruxism Analysis
- Custom Event Scoring

**Advanced Analysis Modules**
- Infant Sleep Stage Scoring
- End Tidal CO2
- Transcutaneous CO2
- Sigh Detector

**Periodic Breathing**
- pH Analysis
- Phase Relation

**Spectral Modules**
- FFT
- Power Spectrum per epoch
- Spectral Color Power Plot
- Spectral Bands Overview
- Spectral Band Ratio Overview

**Import/Export Modules**
- European Data Format (EDF)
- Event Data Export
- Sleep Stages Export
- Spectral Power Bands Export
- Spectral Bins Export

**Data Management Modules**
- Data Archiving
- Store Analysis Results
- Live Interface to Enterprise
- DataManager
- Rembrandt Manager
SMART SLEEP SYSTEMS

- Easy start of various recording types by choosing predefined protocols
- Fully integrated digital video
- Data Look-Back during recording, definable time base and epoch length
- Score the recording on the fly, assisted or manually
- Score earlier part of the recording while still recording new data
- Easy tools for reviewing the recording
- Use multiple screens with different time base for optimal reviewing
- User-definable computer-assisted analysis modules
- Fast and flexible reporting of the results
- Save your standard workspace views for future use
- Easy data archiving with integrated archiving functions
- Full range of pediatric sleep analysis functions