Solar Intelligent Urodynamics



Wireless urodynamics



Solar Highlights

- Wireless less cabling more convenient increased ease-of-use
- Virtual Instructor Program[™] (VIP) assists in achieving good quality investigations
- Modular an upgradeable Solar configuration for every budget and requirement
- Protocols for Urology, Pediatrics, Uro-Gynecology, Gynecology, Proctology and Geriatrics
- Choice purpose designed trolley, pole-mounted, or examination chair
- Complete diagnostic functionality of pelvic floor disorders
- Neuro-urodynamic module offers Free Run EMG, cc-EMG and Stimulation



Medical Measurement Systems (MMS) proudly presents Solar Intelligent Urodynamics. Solar is the result of close collaboration with leading hospitals worldwide and many years of manufacturing experience in urodynamics, combined with the latest digital technology. Wireless Bluetooth® techniques and the unique "Good Urodynamic Practice" (GUP) assistant make the Solar an easy-to-use and complete pelvic floor diagnostic solution. Solar can exactly meet the diagnostic needs of today's healthcare professionals.

The unique flexibility and modularity of Solar make it well-suited for both routine clinical urodynamics as well as for research. Solar can provide the functionality required for immediate needs, but with a large range of additional functions and options that can easily be added at a later stage without modifications. This versatility guarantees and protects your investment for the future.

The wireless remote control allows you to focus on the patient instead of the equipment.





Solar Applications

The Solar can be initially configured with specific applications, but can be easily upgraded at any time without the cost of modifications.

Urodynamic studies for urology and gynecology

- Uroflowmetry
- Cystometry
- Pressure-Flow study
- Urethra Pressure Profiles (UPP)
- Gynecology study
- Cavernosometry
- Ambulatory Urodynamics

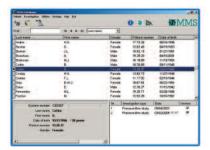
Special pelvic floor functionalities

- Video-urodynamics
- Neuro-urodynamics
- Anorectal manometry
- Biofeedback

Easy urodynamics in 5 steps!

1. Enter or select a patient name

- The extensive patient database enables easy entry and retrieval of patient and investigation data.
- Patient card readers or HIS import enable automated entry and selection of patient data.
- VIP helps to protect against patient duplication.



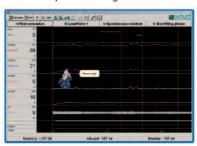
2. Prepare investigation

- Solar software is designed to meet the ICS "Good Urodynamic Practice" guidelines.
- Select a predefined investigation protocol (each investigator can have an individual protocol).
- Preview the urodynamic parameters to ensure best quality results.
- VIP will assist you if the urodynamic pressures are too low or too high.



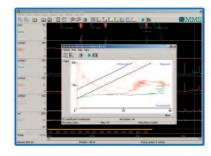
3. Perform investigation

- Only four remote control buttons will guide you through the investigation.
- VIP will automatically ask the patient to cough to provoke leakage.
- Artifacts are detected automatically when the patient coughs.



4. Review investigation

- The Solar software program offers predefined results according to ICS standards.
- Markers, investigation and conclusion comments can easily be added to the investigation.



5. Print your report

• Rapid production of results on screen or paper.

The Virtual Instructor Program[™] (VIP)

The Solar provides, without any doubt, the most comprehensive and userfriendly software. The Virtual Instructor Program[™] (VIP) guides you step-by-step through every urodynamic investigation. With just a few buttons on the remote control, quality investigations are carried out with ease. Solar software is intuitive and logical, requiring minimal training. This saves both time and money and enables you to focus on the patient.



Best solution for Pelvic Floor Disorder diagnosis

The unique modular design of the Solar makes it possible to configure a system to exactly match clinical requirements and budget. Whether a simple low cost system for private practice, or an extensive system for research in a university hospital, both are possible. You can choose what you need!

Solar Gold

The Solar Gold is a state-of-the-art system with a large range of features and functions for urodynamic and pelvic floor investigations and research. The Solar Gold is mainly used by university hospitals and clinics with a large urodynamic workload.



Solar Silver

The Solar Silver is an intelligent urodynamic system that can be used for advanced urodynamic and pelvic floor investigations in almost every hospital environment. The Solar Silver offers great value for money.







Solar Smart

The Solar Smart is a very cost-effective system with a minimal of space requirement. The Solar Smart is compact, easy to set-up and extremely flexible.



Solar Blue

The Solar Blue is a simple, full-functional urodynamic system. It is extremely small, 100% wireless and able to run on rechargeable batteries. Result: no cables, easy movement and simple cleaning of individual modules. The Solar Blue can be used as a table-top system, and can also be mounted on a pole or wall. It can be used with PC or laptop.

Modular, flexible and upgradeable

The Solar is based on a unique development concept; it is digital, it is modular! The modularity of the Solar allows you to obtain the urodynamic functionality that is required for your particular situation. Extra pelvic floor applications can be added later without the need to modify your existing system. This guarantees your investment now and in the future.



Digital plug-and-play system

The Solar is fully digital "plug-andplay" and can be expanded from a simple office-based system up to an elaborate all-inclusive DICOM videourodynamic system.

Easy mounting in every examination room

Peripherals and accessories can be attached to the Solar trolley, an infusion pole, or to an examination chair. The Solar uses universal rails and clamps that are standard in hospitals worldwide. This means easy mounting and creation of versatile urodynamic solutions. There is no need to reconstruct your examination room.



Upgradeable system

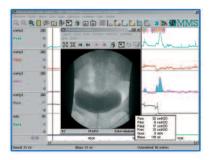
Will your diagnostic system still be state-of-the art tomorrow? The Solar intelligent digital platform adopts every new technique on the market. Hold on to your Solar and add wireless Bluetooth® applications like a wireless flowmeter or wireless patient interface module whenever you want. Who knows what the future will bring?

Extended functionality

Video Urodynamics

Image digitization combined and synchronized with urodynamic graphs and data enhances the diagnosis of lower urinary tract dysfunction. MMS Video-urodynamics offers:

- Synchronizing images with pressure, flow and EMG recordings
- Single video images and cine loops
- Interfacing standard and high resolution images



Networking and HIS-links

Diagnostic systems often do not stand alone. Connectability with other hospital departments as well as the outside world is often required for cost-efficiency, time saving, and data security.

- Extensive networking capabilities
- Remote Monitoring
- Hospital Information System (HIS) import and export.



Neuro-urology

Each Solar can be expanded with a Neuro Module which offers:

- Free running EMG, ccEMG
- Pudendal Nerve Stimulation (PNS)
- Motor Nerve Conduction
- Sacral Reflex
- Sensory Threshold**not available in the USA

Biofeedback Pelvic floor training

The Solar can include Biofeedback, in which signals from the lower urinary tract and pelvic floor are displayed real-time to the patient as a friendly, patient-responsive animation. Biofeedback training helps develop beneficial and conscious control over body functions. Several scenes and animations are available.

Research functionality

The Solar offers additional functionality for statistical analysis and presentations, such as:

- Extensive filter and query options
- Easy sorting and selection of patient groups for statistical analysis
- Patient demographics and investigation data can be exported to a text editor, spreadsheet or database software
- Investigation graphs can be exported as JPEG and BMP images
- Easy integration with Microsoft® PowerPoint presentations

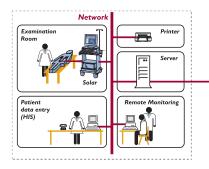
Ambulatory Urodynamics

The Luna is an easy-to-use ambulatory urodynamic recorder.

Using wireless Bluetooth® technology, in-progress investigations can be viewed full screen. The Luna can record in excess of 24 hours on just one penlight battery and weighs less than 200 grams.

Luna can be used "stand alone" or integrated with a Solar urodynamic system.

Ambulatory Urodynamics has never been this easy.



DICOM Video Urodynamics

Use the full extent of your hospital's ultra high-resolution video-network infrastructure. Images taken during video urodynamics can be networked and stored on the PACS of the hospital eliminating the requirement for time-consuming back-ups. Use your laser printer for printing high resolution X-ray images. DICOM enhances the functionality of your Solar urodynamic system.





Anorectal Manometry

The anorectal manometry study can be added to the Solar to objectively assess the function of the rectum and anorectal sphincter.

Four or more pressures can be measured. The anorectal manometry program includes resting, squeeze, cough, push, RAIR and sensation tests. The catheter puller system creates an anal rest or squeeze profile. More detailed information can be obtained from a 3-dimensional Vector Volume Plot (3D-VVP).



Wireless urodynamics

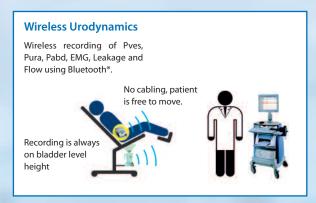
Wireless where it matters!

MMS has implemented Bluetooth® to provide a variety of highly practical wireless urodynamic solutions.

- A completely wireless flowmeter. No more untidy cables.
 No need to drill holes in toilet walls for cables.
- A wireless catheter puller offers great convenience during UPP studies.
- The wireless remote control allows attention to be focused on the patient instead of the equipment.

Solar Luna

- The Luna Bluetooth® patient interface module provides wireless recording of Pressures, Leakage and EMG during stationary examinations.
 - The patient can move around more freely and will be less stressed.
 - If the urodynamic study offers insufficient information, you can prolong with an ambulatory with just a few mouse clicks. No need to replace catheters. No need to make a new appointment.
 - No bladder level adjustments needed.



Wireless PC Flowmeter

Flowmaster is a computer-based Bluetooth® Flowmeter for fast and easy uroflowmetry. No cables are required to connect the flowmeter to the computer. The flowmeter can be placed in a toilet. Recordings are automatically stored in a non-dedicated computer. Flowmaster uses special software to eliminate artefacts from flow data.

Medical Measurement Systems b.v.

P.O. Box 580 7500 AN Enschede The Netherlands **T**: +31 - 53 - 480 37 00

F: +31 - 53 - 480 37 01
E:info@mmsinternational.com
I:www.mmsinternational.com

Medical Measurement Systems USA, Inc.

383 Central Ave, Suite LL40
Dover, NH 03820, USA
T: 603 - 750-0037
T: 800 - 236-9310
F: 603 - 750-3155
E: info@mmsusa.net
I: www.mmsusa.net

MMS distributors can be found at: www.mmsinternational.com



Solar adopts new technology

The unique concept of the Solar makes it easy to adopt and implement new technology as it becomes available.

- Patient data can automatically be entered into the Solar database using patient or smart card readers. This saves time, prevents typing errors, and provides uniform data entry.
- In addition to using the remote control, which is standard with every Solar, the complete urodynamic investigation can also be carried out by "pressing" buttons on the "Touch Screen" computer monitor.

Complete range of urodynamic catheters

MMS offers a complete range of pressure transducers, water perfused, air-charged and solid state catheters, filling tubes and EMG accessories to complement all Solar urodynamic systems.



- Urodynamic starter kits
- Bladder filling catheters
- Double lumen cystometry catheters
- Triple lumen UPP catheters
- Rectal balloon catheters
- Disposable EMG surface electrodes
- Pressure transducers & domes
- Air-charged catheters

Your official MMS distributor: