



**tic** Medizintechnik  
research development production

Further products of **diagnosticline**

<b>Galileo</b>	advanced urodynamics with video option
<b>Newton</b>	compact urodynamics
<b>Cassini</b>	rectal manometry system and EMG
<b>UroPort</b>	digital uroflowmeter

**diagnosticline**

Uroflowmetry

**KOPERNIKUS**

made in  
Germany

**Accessories:**

- ti1058 EMG electrodes 22 x 30 mm, high conductivity (25 pieces)
- ti1937 Thermal printer paper, 10,5 m length (1 pack includes 10 roles)

10/2012 / R2 CG

**Technical specifications:**

flow channel	weight transducer
calibration and alignment	software, automatical alignment
range of measure	0 - 100 ml/s
maximum capacity	1100 g
precision	+/- 2% of the real value
resolution	< 0,5 ml/s
hardware resolution	24 Bit / 1 kHz
<b>EMG-channels</b>	
safety of patient	galvanic separation of EMG-channels
number of channels	1 input channel / 1 optional EMG-channel
sensitivity	< 1 $\mu$ V
<b>Input/Output</b>	
input medium	monitor, printer, interface
printer	TFT-monitor with touchscreen high performance-thermal paper printer 4"
interface	LAN



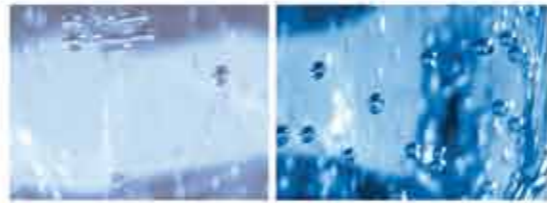
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„Sphaera  
Armillaris  
Copernicana“





Uroflowmetry



# KOPERNIKUS - Uroflowmetry and Electromyography

Which demands do you put on a UroFlow-EMG-measurement device?  
The Kopernikus offers you:

- maximum of user-friendliness
- intuitive graphical user interface (GUI), windows®-based  
Windows is a registered trade mark of the Microsoft Corporation, Redmond, Washington (USA)
- touchscreen
- conclusive chronology of operation steps
- 2nd EMG-channel for the recording of abdominal wall contractions (optional)
- determination of all relevant flow-parameters according to ICS-standards, additional electromyographical data
- nomogram according to Siroky et al. (optional)



**A functional micturition disorder can be the cause for the enuresis in childhood. The Uroflowmetry with the simultaneous electromyography of the pelvic floor muscles supplies decisive indication of a dyscoordinated miction.**

Concerning the origin of functional micturition disorder in childhood there are different causes:

- a genetic pre-disposition, which results in a delayed maturing of the detrusor-sphincter-coordination
- separate disorder of innervation of bladder and rectum
- micturition disorder because of chronical obstipation
- acquired psychological disfunction because of a premature neatness education
- disfunction of bladder caused by a lack of detrusor stability or caused by relapsing infection of urinary tract

### Basic diagnostics

As urological basic diagnostics the Uroflowmetry is part of the most realized inspections due to the simple use and the non-invasiveness. In particular it is suitable for the first screening and for the continual supervision of micturition disorders. Especially with children the non-invasiveness of the combined Uroflowmetry and Electromyography is of exceptional importance. Children often can not define their complaints. In that case the wide and easy operation of the Uroflowmetry and Electromyography enables the determination of functional micturition disorders.

### Evidence and validity of results of measurement

The arrangement of the examination room as well as the children's willingness to cooperate are important requirements for the evidence and validity of the measurement results.

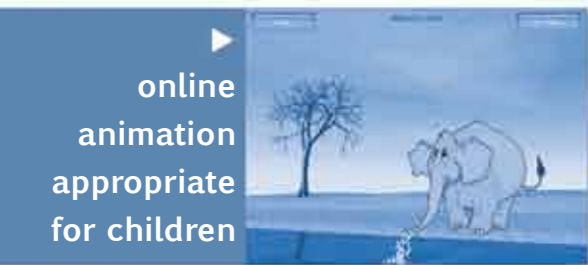
· data acquisition by means of highly precise scale unit and EMG-amplifier

· animation of Flow- and EMG appropriate for children

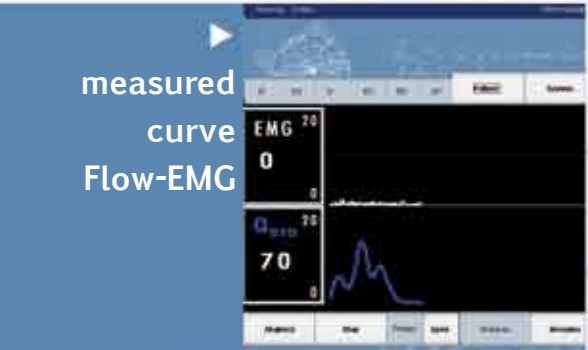
· external screen for optimum display of animation (optional)

· immediate highspeed print-out of the flow-parameters, including doctors surgery

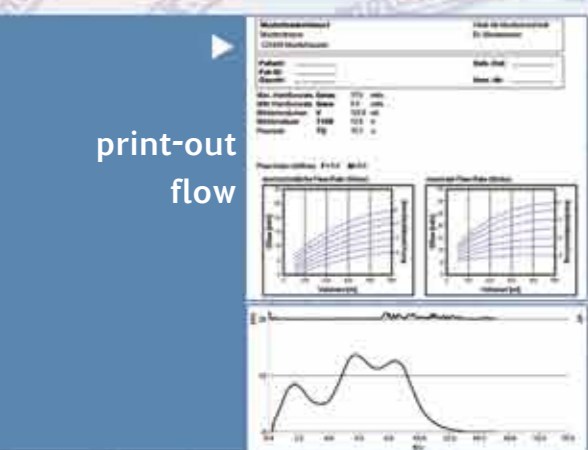
· storage and administration of patient data and measurement results with external database (optional)



online animation appropriate for children



measured curve Flow-EMG



print-out flow

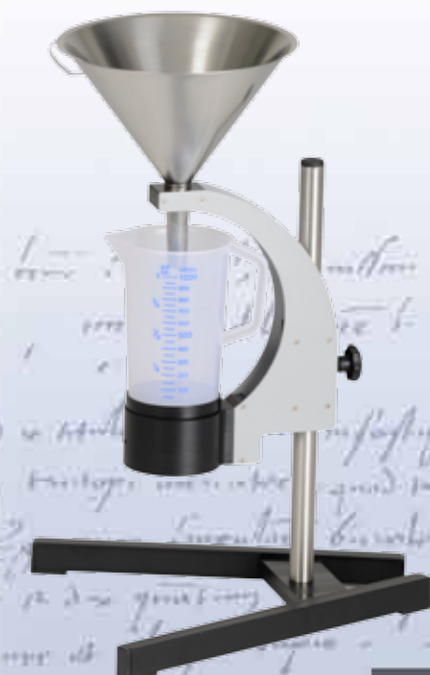


colourful micturition chair



· CE-marked in accordance with the MPG and European directive 93/42/EEC, IEC 601-1, EN 60601-1

· designed and made in Germany



highly precise scale unit

