



Multifunctional Unit

Uromic Tango¹⁶



Uromic TANGO¹⁶ is unique 16-channel multifunctional polygraph for biomedical measurements where all measuring channels can be individually configured to fulfill the needs of standard functional diagnostics and experimental measurements in different applications (urology, urogynecology, paediatrics, surgery and gastroenterology).

The system can work with wide range of transducers that are connected by cable or wirelessly with own communication protocol protected against signal interference.

The compact system has all needed modules built inside its ergonomic case, including original high-quality mechanical parts as precise peristaltic pump for filling cystometry and profilometry or unique sterilizable profilometric puller.

The unit supports videourodynamics—either single images or cine loop (input for X-ray, ultrasound endoscope and other image data).

Built-in ultrasound module for B mode. Optional CFM mode and Power angio doppler mode.

Standard software:

- Urodynamics measurement protocols (uroflowmetry, filling and miction cystometry, PQ study, VLPP, Urethra Pressure Profile, EMG and biofeedback).
- Anorectal and esophageal manometry.
- Software module for creation own protocols.
- Freely programmable measurement protocols especially for research and special applications.



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Uromic Tango¹⁶

Uromic Tango¹⁶ is 16-channel multifunctional polygraph for biomedical measurements. Universal inputs for measurements using wide range of transducers connected by cable or wirelessly. Simple software definition of measurement protocols enables use in different applications. Number of channels allows to use more types of transducers for certain measurements. The system can be used for standard functional diagnostics or experimental measurements in wide range of applications (urology, urogynecology, paediatrics, surgery and gastroenterology. Two mechanical peripheries can be connected (cystometric/profilometric pump, puller). Measured data can be combined and synchronically recorded together with image data (videourodynamics). Built-in ultrasound module for B mode. Ultrasound module for CFM mode and Power angio doppler can be built-in as an option.

• Uroflowmeter

Standard weight flow transducer (standardly one, optimum two), possibility of spinning disc sensor connection.

Flow range: 0 – 50 ml/s, volume 0 – 1250 ml

Accuracy: +/- 5 % of the range

• Pressure measurements

Number of channels: 12 (up to 16 when UFM/EMG channels are used)

Large spectrum of pressure sensors: Air charged T-Doc, Micro Tip catheters for urodynamics and anorectal manometry. Classic transducers for pressure transmission by water column (single use or reusable with replaceable domes).

Standard measurement range: – 50 to +250 cm H₂O

Accuracy: +/- 5 % of the range

• EMG

Standard number of channels: 2

Frequency: 1 Hz–10 kHz (–6 dB)

EMG processing: EMG envelope
EMG curve

• Puller for profilometry

Sterilizable catheter holder, deinfected engine unit.

Speed of pull out: 0,5; 1; 2; 3; 4; 5 mm/s

Accuracy: +/- 3 % of the range

Usable length: 200 mm

• Cystometric / profilometric pump

Precise original mechanic construction of peristaltic pump, adjustable for more pump sets.

Range: 0,5–120 ml/min

• System

Inbuilt control system: Nexcom industrial fanless computer

Display: flat, 19" anti glare display

Control: PC keyboard, standard size, trackball

Interface: USB port

System: MS Windows XP embedded or W7,
MS Word

• Diagnostic protocols

Programmable with user friendly software.

Standard software includes:

• Urodynamics:

UFM, automatic UFM

Cystometry (filling and voiding cystometry)

PQ study analyses: Schafer, Chess, A – G

PURR, LPURR, URR, QLPP (conductivity)

Leak Point Pressure (ALPP, VLPP, CLPP)

Video LPP, UPP,

EMG, EMG biofeedback

• Anorectal and esophageal manometry:

4 - 8 channels anorectal manometry

4 - 8 channels esophageal

Volume Vector analysis

• Urodynamics Data Viewer

data analysis on another computer

• Ultrasound

Built-in ultrasound module enables complex examination; abdominal or introital ultrasonography (3-7 MHz transducer); transrectal or transvaginal ultrasonography (5-8 MHz transducer). B mode examination, colour doppler mapping and Power angio doppler imaging. Pulse doppler is displayed in triplex mode.

• Videourodynamics

Fast videograber for full PAL definition

Input: 720 x 576, 25 frames/sec

Record: single image and cineloop record

database of images

Image processing: Cineloop/single images

Copy to report

Angle measurement

Distance measurement

• Software for external image data recording DigiPict 2,0

• Dimensions

Height: 105 cm, width: 60 cm, depth: 70 cm, weight: 60 kg

Language: Czech, English, German, Russian, French, Danish.

Technology for simple creating of another local language version.

• Safety

IEC EN 60601-1. Class I, type BF (Medical Electrical Equipment)

CE0434 - marked (EU medical device direct 93/42 EEC).

Voltage: 230 V +/- 10 % 50-60 Hz

Power supply: max. 600 VA

