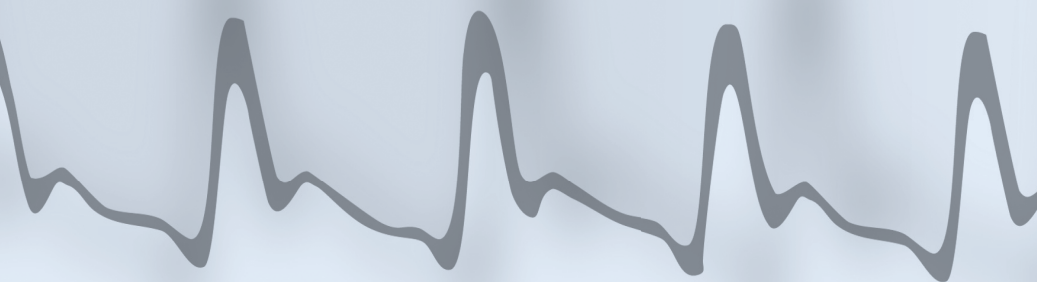




TASK FORCE® MONITOR

THE NONINVASIVE STANDARD

FULL HEMODYNAMICS &
AUTONOMIC FUNCTION



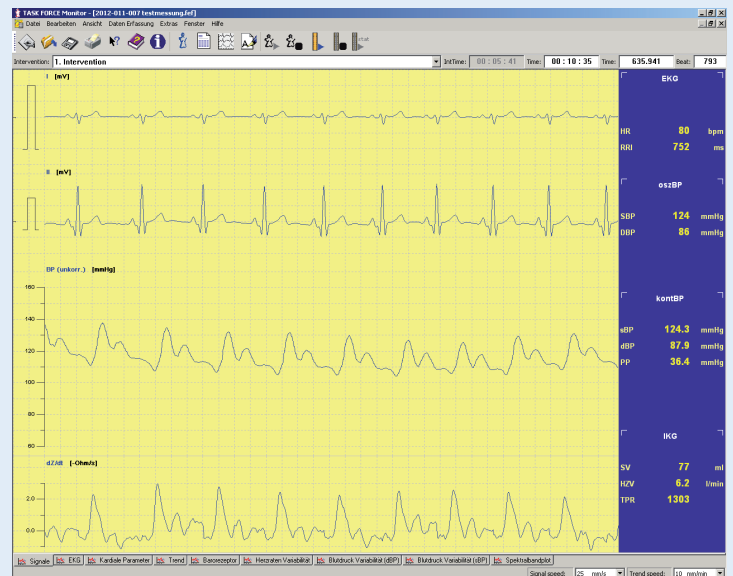
cnsystems 

ALL-IN-ONE FOR COMPLETE HEMODYNAMIC ASSESSMENT

A UNIQUE COMBINATION OF INNOVATIVE AND GOLD STANDARD METHODS - FULLY SYNCHRONIZED

PATIENT SIGNALS & FEATURES

- > **CNAP®** – continuous noninvasive arterial pressure
 - > high-fidelity blood pressure waveform
 - > real time systolic, diastolic and mean blood pressure
 - > double finger sensors for output reliability
- > **NBP** – brachial blood pressure via standard upper arm cuff
- > **ECG** – high resolution 3-lead, 6-channel display
- > **CNCO®** – continuous noninvasive cardiac output
 - > real time cardiac output and stroke volume using thoracic impedance.



> Online Display

- > graphic and numeric display of patient parameters and trends
- > ability to add markers and comments during the test

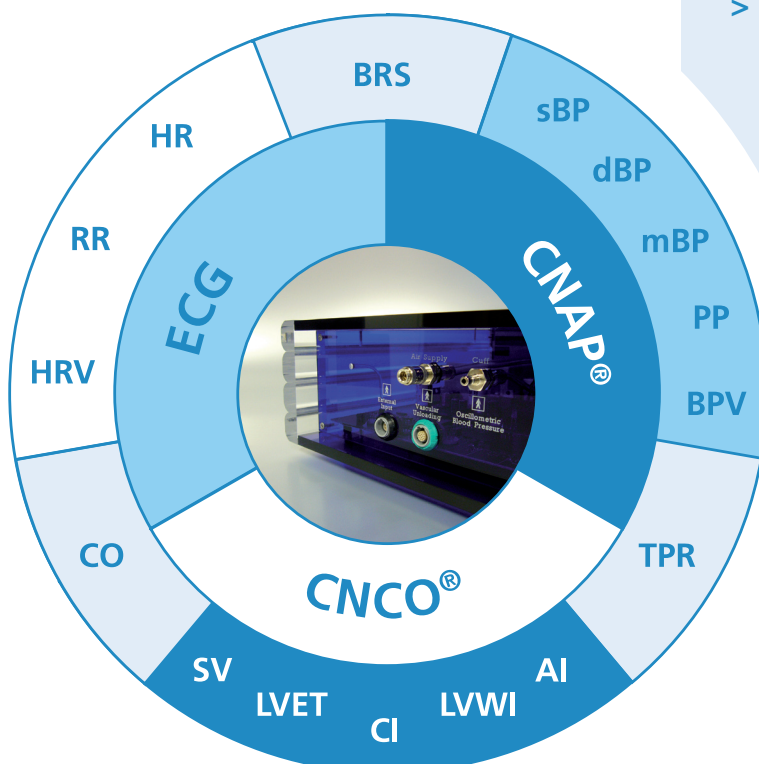
> Offline Analysis

- > use callipers to measure time intervals and parameter changes
- > add comments, diagnosis, or treatment plan via template or free form typing

> Output

- > customized print reports with trends and statistics
- > print outs of real time ECG and BP waveforms
- > ability to export data to MS Excel®, Matlab®, or ASCII file

RECORDED PARAMETERS



NONINVASIVE AND CONTINUOUS

EVALUATION OF RAPID AND SHORT-TERM CHANGES IN HEMODYNAMICS AND AUTONOMIC FUNCTION



APPLICATIONS

- > **Cardiology/ Electrophysiology**
 - > Syncope Assessment/ Tilt testing
 - > Pacemakers: CRT, AV-optimization
- > **Neurology**
 - > Autonomic Function Testing
- > **Psychophysiology/ Mental Health**
- > **Physiology**
- > **Pharmacology**
- > **Pediatrics**
- > **Occupational Medicine**
- > **Sports Medicine/ Health Sciences/ Prevention**

YOUR ADVANTAGE

ALL-IN-ONE DESIGN

- > one device - one click to start test
- > unique combination of innovative methods and gold standards allows for full hemodynamic and autonomic assessment

CONTINUOUS FOR EVERY HEARTBEAT

- > enables early detection of rapid and short-term changes in hemodynamics

NONINVASIVE SETUP

- > easy-to-use sensors
- > reuseable arm and finger cuffs
- > disposable electrodes

PROVES TESTING QUALITY

- > all signals are synchronized and in real-time
- > hands-free data recording
- > better diagnosis with more accurate data

"We chose the Task Force® Monitor for a large, multi-center NIH study due to its ability to collect beat-to-beat data for heart rate, blood pressure, and baroreceptor sensitivity using novel, noninvasive technology. In addition to it's ease of use, we have been pleased with both the data quality and the ability to easily export data."

Jeffrey Olgin, MD, Chief of Cardiology, University of California, San Francisco

"The Task Force® Monitor has revolutionized ease-of-use in performing and generating data both for research and clinical purposes. I am especially impressed with the amount of information gathered. As a clinical fellow at the NYU DyTestsautonomia Center I did comparative analysis using this equipment to look at cardiac output and stroke volume and found it to be quite accurate."

Ishan Adhikari, MD, University of Texas Health Science Center

TECHNICAL SPECIFICATIONS

TASK FORCE® MONITOR

CNAP® – CONTINUOUS NONINVASIVE ARTERIAL PRESSURE

Measuring range	30 - 250 mmHg; Heart rate: up to 150 bpm
Additional NBP – oscillometric blood pressure	scaling to brachial pressure (upper arm), accuracy +/- 5 mmHg

NBP – OSCILLOMETRIC BLOOD PRESSURE

Measuring range	30 - 250 mmHg
Accuracy	meets ANSI/AAMI SP10:1992 and 2002

ECG - ELECTRO CARDIOGRAPHY

Channels /display	3 leads, 6 channel display
Measuring range	+/- 5 mV
Sampling frequency	1000 Hz
Accuracy	+/- 5 µV

CNCO® - CONTINUOUS NONINVASIVE CARDIAC OUTPUT THROUGH IMPEDANCE CARDIOGRAPHY (ICG)

Measuring range	dZ/dt: +/-10 Ω/s
Patient measuring current/ frequency	< 400µA RMS/ 40 kHz

ELECTRICAL

Nominal voltage/ Supply frequency	230 VAC/ 50Hz or 115VAC/ 60Hz
Power consumption, typ.	120mA @ 230 VAC/ 240mA @ 115 VAC, 25 W

PHYSICAL

Weight (main device excl. PC)	6.1 kg (13.4 lbs)
Measures (main device excl. PC)	402 x 104 x 290 mm (158/ 41/ 114 inches w*h*d)

ENVIRONMENTAL

Temperature	operation: 10°C - 40°C (50°F - 104°F),	storage: 0°C - 40°C (32°F - 104°F)
Humidity	operation: 30% - 85% non condensing	storage: 15% - 95%, non condensing, wrapped
Altitude	operation: 647 - 1059 hPa;	storage: 500 - 1060 hPa

COMPUTER

Type	high quality PC + flatscreen: minimum requirement for running the system (for up-to-date specification details please contact CNSystems or our local distributor)
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PRINTER

Type	colour inkjet for generating printed reports (details available at CNSystems)
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ELECTRODES

Type	ECG: spot gel-electrodes; CNCO/ ICG: band-electrodes (package available at CNSystems)
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CONNECTIVITY - EXTERNAL INPUT (2 channels available)

Input voltage	+/- 5V
Overvoltage protection	250 V RMS
Input impedance	380 kΩ +/- 10%
Sampling frequency	1000 Hz

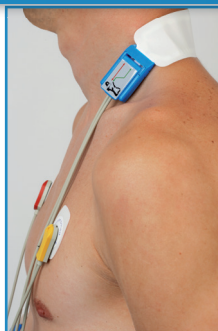
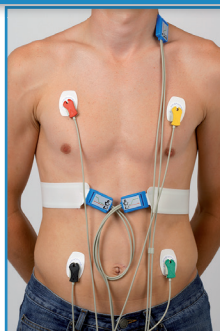
COMPLIANCE AND APPROVALS

Protection class I (IEC 60601)	> EN 60601-1	> EN 60601-2-25	> ANSI/AAMI SP10
Conformity Class II a (93/42/EEC)	> EN 60601-1-2	> EN 60601-2-30	> EN 1060-1
Degree of protection BF (CNAP, NBP)	> EN 60601-1-4	> EN 60601-2-49	> EN 1060-3
CF (ECG, CNCO)			
Certifications	> CE (TÜV-A-MT-1/10/1Q034) > FDA 510k: K014063	> CAN/CSA C22.2 No.601.1-M90 > CAN Med.Dev.Lic.: 77001	> UL 60601-1:2003: NRTL U8 08 03 44130 002

INTELLECTUAL PROPERTY

Patents	> AT 407.949 > WO 2000059369 > EU 1 179 991 > US 6.669.648	> WO 2004 030535 > EU 1 551 290 > US 7.783.345B2 > WO 2005037097	> EU 1 675 507 > US 8,114,025 plus another 33 patents
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Task Force® Monitor – The expert's system for evaluating hemodynamics and autonomic function



local distributor:



CNSystems Medizintechnik AG
Reininghausstrasse 13, 8020 Graz/Austria
Tel.: +43 316 723456-0, Fax: +43 316 723456-2
E-Mail: office@cnsystems.at, www.cnsystems.at

For USA: Caution: Federal law restricts this device to sale by or on the order of a physician (or proper licensed practitioner).