

TCM400

Specifications

Hardware

Computer specifications

CPU: AMD ETX LX800, 500 MHz (Pentium Class)
 RAM: 128 MB
 Software platform: Windows CE 5.0
 Start-up time: max 1 min

Operating conditions

Operating environment: 12-28 °C/54-82 °F
 Built-in barometer:
 Range: 375-825 mmHg or 50-110 kPa
 Accuracy: ±5 mmHg or 0.67 kPa
 Altitude: 2290 m/7513 ft above sea level
 Power: 100-240 V, 50-60 Hz, 70 VA (max.)
 Built-in battery: rechargeable Pb battery
 Typical operating time: 1 hour per charge at 25 °C

Software

Measuring range

Transcutaneous oxygen tension/ $tcpO_2$:
 0-2000 mmHg or 0-266.7 kPa
 Sensor heating power: 10-500 mW; displayed accuracy: ±3%
 Calculated regional perfusion index (RPI): 0-3

Calibration

Ambient air

Patient data storage

Up to 48 hours of measuring data in 2-sec data intervals
 Download of stored patient data to PC or printer

Dimensions

TCM400 monitor

Width	30.8 cm	12.1 in
Depth	23 cm	9.1 in
Height	16 cm	6.3 in
Weight	4 kg	8.8 lbs

Display

Screen: 6.5" color touch TFT, full VGA (640 × 480)
 Display options: normal view (numeric), trend table, trend curve
 Display update period: 2 sec (numerical values and pO_2 graphs)

Interface connections

Serial output: RS232
 Printer output: USB 2.0
 Printer protocol: HP PCL3
 Print reports: trend table, trend curve

Site timer

Indication of remaining measuring time
 Measuring time is elapsed: clock triggers an alarm and sensor temperature is off
 Range: 0-99 hours in increments of 1 sec/1 min

Configuration

Up to 6 O_2 modules / $tcpO_2$ sensors

Languages

Danish, Dutch, English, French, German, Greek, Italian,
 Japanese, Portuguese, Russian, Spanish

$tcpO_2$ module

Width	14.5 cm	5.7 in
Depth	14.8 cm	5.8 in
Height	3.5 cm	1.4 in
Weight	0.22 kg	0.5 lbs

tc Sensor E5250

Sensor specifications

Measuring principle

Clark-type pO_2 sensor
O₂ cathode: 25 μ m platinum
O₂ anode (reference): silver

Sensor temperature

Selectable between 37-45 °C in steps of 0.5 °C
Accuracy: \pm 0.1 °C (excluding sensor)
Automatic temperature off when site time is elapsed

Accessories

Fixation rings (904-891)

Diameter: 30 mm
Adhesive material: medical grade acrylic adhesive
Ring material: PVC
Contact solution: 1.2-propanediol and deionized water

Membranes (904-308)

Membrane material: PP membranes
Electrolyte solution: 1.2-propanediol, potassium chloride, sodium hydrogen carbonate and deionized water

Compliance

Patient safety The instruments comply with IEC 60601-1:1993, IEC 60601-1-2:2001, IEC 60601-2-23:1999. The following test house has approved the instrument: CSA in Canada according to CAN/CSA-C22.2 No. 601.1-M90, 601.1S1-94, 601.1B-98, and UL std. No. 601.2.23-98 and 60601-1.

Type BF equipment (body floating)

This product complies with the requirements of the Medical Device Directive 93/42/EEC June 1993



Sensor performance (in vitro)

Conditions: sensor temperature of 43 °C
Response time t_{cpO_2} : (10-90%): \leq 11 sec
Drift: \leq 1.0 %/h
Linearity: at 0% O₂: better than 1 mmHg or 0.13 kPa
at 90 % O₂: better than 25 mmHg or 0.67 kPa (equal to 4%)

Sensor remembraning

One week

Sensor dimensions

Diameter: 15 mm or 0.6 in
Height: 11.3 mm or 0.44 in
Weight: 2.9 g or 0.1 oz
Sensor cable length: 3 m or 9.8 ft, shielded, flexible, polyurethane coated

Biocompatibility

All materials are latex-free

EMC This product complies with the requirements of the harmonized standard EN60601-1-2:2001

EMC Emission EN55011:1998, level A.

EMC Immunity As stated in EN60601-1-2:2001, the immunity has been tested according to the IEC 61000 series.(See also IEC 60601-2-23:1999).

Performance This product complies with the IEC 60601-2-23:1999

Contact us

Radiometer is represented in more than 100 countries.
For the local Radiometer representative nearest you, please go to www.radiometer.com.

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