

### GENERAL

- **Product Name** Cheetah NICOM®
- **Technology** BIOREACTANCE®
- **Method of Measurement** Non invasive continuous cardiac output (CCO)
- **Dimensions** 22cm x 26cm x 20cm
- **Weight** 4.5 Kg
- **Cable** 3.7 m, NICOM® Patient cable
- **Sensors** One set of NICOM® sensors

### SYSTEM

- **Ambient Temperature and Humidity**  
Operation condition: 10-40°C/50-104°F, 50-75%RH  
Atmospheric pressure: 700 hPa to 1060 hPa  
Storage condition: 0-50°C/32-122°F, 50-75%RH  
Delivery condition: 0-50°C/32-122°F, 50-75%RH  
Atmospheric pressure: 700 hPa to 1060 hPa
- **Standards**  
IEC/EN 60601-1 (class I Type BF)  
IEC/EN 60601-1-2  
IEC 60068-2  
TUV Rheinland of North America  
ISO 13485 Standards

### FEATURES SUMMARY

- **Display**  
8" TFT 640 x 480 pixels
- **Control**  
Touch screen, keypad
- **Connections**  
NICOM® cable connector  
Noninvasive blood pressure (NIBP) connector  
1x Serial Port  
1x USB A  
1x USB B  
1x LAN  
Power cable inlet connector  
Plug connector for potential equalization  
SpO2 connector (future use)

### BATTERY

- **Type** Chargeable Ni-MH
- **Charge Time** 6 hrs
- **Operating Time** Approximately 90 min when fully charged

### POWER

- **AC Mains** 100v-240v ~ 2A ; 50/60 Hz
- **Skin Voltage Tolerance** ±300 mV
- **Frequency Response** 8Hz
- **Time Constant** 0.125 Sec
- **Filter** 75KHz
- **Rated Voltage/Current Power Switch Supply**  
100V to 240V
- **Rated Frequency** 50/60 Hz
- **Fuses** 2x T2AL250V
- **A/D converter** at 12 bit (2.5 mV LSB)
- **Sample rate** 500 per sec

### MAIN FEATURES

- Hemodynamic Dashboard display
- Raw waveform display
- **Multiple Trends Display**  
Screen trending display options: 5 min, 20 min, 30 min, 1 hr, 4 hrs, 10 hrs  
Tabular display
- **Protocol Wizards**  
Passive Leg Raise wizard  
BIOREACTANCE Orthostatic wizard
- **Events Marker**
- **Connectivity to External Electronic Medical Records (EMR) System via LAN or Serial Port**  
Data Streaming Rate: 30 sec, 1 min, 3 min, 5 min, 7 min, 10 min  
Maximum Baud Rate (Serial): 115200 baud  
Minimum Baud Rate (Serial): 9600 baud  
LAN Rate: 10/100 bps  
Data Format: XML
- **Manual Data Entries**  
MAP  
SpO2 (non US)  
Hgb (non US)  
Data updates on screen every 30 sec or 1 min

### NIBP FUNCTIONALITY

#### Suntech Medical Technology

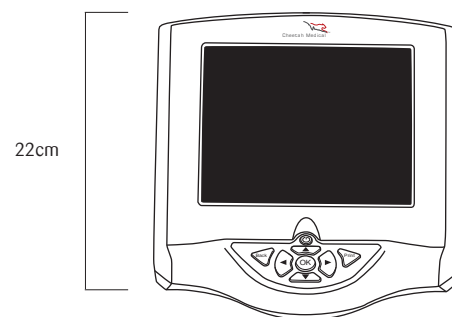
- **Patient Range** Neonate through adult
- **Method of Measurement** Oscillometry with step deflation
- **Operating Voltage** +5.3VDC to +14.5VDC
- **Sleep Mode Power** 1.4mW @ 6V (typical)
- **Accuracy** Meets ANSI/AAMI SP10-1992
- **Temperature/Humidity**  
▪ **Operating:** 0°C to 50°C, <95% RH, non-condensing  
▪ **Storage:** -20°C to 65°C, <95% RH, non-condensing
- **Pressure Accuracy**  
The static pressure measurement is within ±3mmHg throughout the temperature range
- **Measurements**  
Automatic: 1, 3, 5, 10, 15, 30, 60 and 90 min intervals  
Manual: Single measurement initiated by user
- **Measurement Ranges - Pressure**  
Adult: 20 to 260 mmHg  
Pediatric: 20 to 160 mmHg  
Neonate: 20 to 130 mmHg
- **Measurement Ranges - Pulse Rate**  
30 to 220 BPM (Beats Per Minute)
- **Inputs/Outputs**  
System Power  
Bi-directional RS232 or TTL serial communication
- **Safety**  
Independent safety microprocessor monitors cuff pressure, measurement time, as well as the operation of the main microprocessor
- **Standards**  
Meets AAMI SP10-1992, EN60601-1, EN60601-2-30, EN1060-1, EN1060-3 standards
- **Specialized Clinical Applications**  
Suntech customized NIBP module for Dialysis

### NICOM ELECTRONIC MEDICAL RECORDS (EMR) INTERFACE

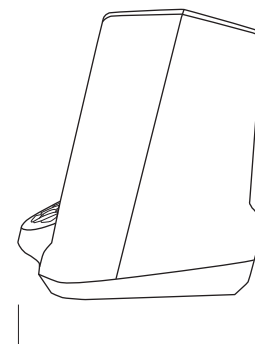
- PDF reports
- Excel reports
- Data export in XML
- Password protection
- Hemodynamic status PC display with visit-to-visit date

### DATA STORAGE CAPACITY

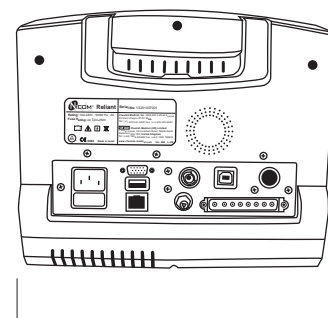
- **11520 readings**  
1 min update rate - 192 hrs  
30 sec update rate - 96 hrs



22cm



20cm

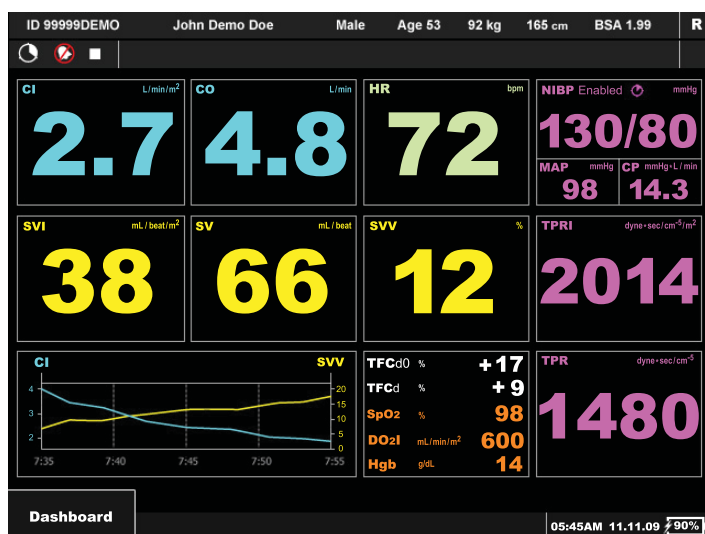


26cm

## Clinical Parameters

Parameter	Short For	Units
CO	Cardiac Output	L/min
CI	Cardiac Index	L/min/m <sup>2</sup>
SV	Stroke Volume	mL/beat
SVI	Stroke Volume Index	mL/beat/m <sup>2</sup>
SVV	Stroke Volume Variation	%
HR	Heart Rate	BPM
NIBP	Blood Pressure: Systolic, Diastolic, MAP	mmHg
TPR	Total Peripheral Resistance	dyne x sec/cm <sup>5</sup>
TPRI	Total Peripheral Resistance Index	dyne x sec/cm <sup>5</sup> /m <sup>2</sup>
CP	Cardiac Power	mmHg x L/min
CPI	Cardiac Power Index	mmHg x L/min/m <sup>2</sup>
TFC	Thoracic Fluid Content	1000/Ohm
TFCd	TFC Change From Preset Time	%
TFCd0	TFC Change From Base Line	%
Zo	Thoracic Impedance	Ohms
VET	Ventricular Ejection Time	msec
dX/dt	NICOM First Derivative	
SpO2 (non US, manually entered)	Arterial Hemoglobin Oxygen Saturation	%
DO2I (non US, manually entered)	Oxygen Delivery Index	mL/min/m <sup>2</sup>
Hgb (non US, manually entered)	Hemoglobin	g/dL
Height		inches/cm
Weight		lb/kg
BSA	Body Surface Area	
1 NICOM oscilogram		
2 ECG/Time Marker Oscilogram		

## Display Screens



Cheetah NICOM® Hemodynamic Dashboard (non US)



Cheetah NICOM® Trend Display