

# RVS-100/200

## ri-vital®



Vital Signs Patient Monitors

# RVS-100 ADVANCED VITAL SIGNS MONITOR

The RVS-100 is an advanced vital signs monitor which offers pulse oximetry, blood pressure and temperature measurements. The device has 'Monitor', 'Spot Check' and 'Triage' profile options and a high performance touchscreen. The RVS - 100 can communicate through a wired or wireless connection to the hospital's EMR, according to the HL7 standard. The highly flexible, modular design offers many configurations and settings to suit the needs of hospitals and clinics as well as office based and long-term care settings.



## Key Features

- 3 measurement modes (Monitor, Spot-check, Triage)
- High-sensitivity 8" TFT colour touch screen with self-explanatory user interface and integrated help-function
- Displays SYS, DIA, MAP, Pulse, Temp, Plethysmogram
- Clinical grade NIBP\* including averaging mode (2-5 readings)
- Riester\*, Masimo\* or Nellcor\* Oximax SpO2
- Predictive Thermometer (Filac 3000)
- Connectivity with the EMR - follows the HL7 standard
- LAN Connectivity as standard
- Programmable alarms (audible, visible) with 3 priority levels
- Supports nurse call RJ11 port
- Available as wall, desk and floor model
- Internal memory for 5,000 measurements
- Lithium-ion battery with 11 hours run time (Automatic mode, 15min intervals)
- Li-ion battery with up to 17h ON-time
- 2 year warranty  
(\*includes neonate mode)

## Options

- Thermal printer (internal)
- Barcode reader
- Mobile stand including basket for storage (cuffs, sensors, cables)
- WiFi

## Accessories supplied with monitor

- NIBP extension tube
- 2 cuffs (adult & adult large incl. connectors)
- SpO2 sensor adult
- SpO2 extension cable
- Oral temperature probe\*
- Probe covers\*  
(\*only if pred. thermometer module is ordered)



**Order information – Riester Vital Signs Monitor RVS-100**

REF	Description
1960-RRXXE	NIBP (Riester) + SpO2 (Riester)
1960-RRBXE	NIBP (Riester) + SpO2 (Riester) + Pred. Temp
1960-RRBPE	NIBP (Riester) + SpO2 (Riester) + Pred. Temp + Printer
1960-RNXXE	NIBP (Riester) + SpO2 (Nellcor)
1960-RNBXE	NIBP (Riester) + SpO2 (Nellcor) + Pred. Temp
1960-RNBPE	NIBP (Riester) + SpO2 (Nellcor) + Pred. Temp + Printer
1960-RMXXE	NIBP (Riester) + SpO2 (Masimo)
1960-RMBXE	NIBP (Riester) + SpO2 (Masimo) + Pred. Temp
1960-RMBPE	NIBP (Riester) + SpO2 (Masimo) + Pred. Temp + Printer
13315	Barcode Reader
13317	Mobile Stand (basket included)
12669	Oral probe (blue) for predictive thermometer
12668	Rectal probe (red) for predictive thermometer
12688	Probe covers for predictive thermometer, pack of 500 ea (25 x 20 ea)
13300	SpO2-Sensor Riester Neonatal
13301	SpO2-Sensor Riester Children
13302	SpO2-Sensor Riester Adult
13303	SpO2-Sensor Nellcor Neonatal
13304	SpO2-Sensor Nellcor Children
13305	SpO2-Sensor Nellcor Adult
13306	SpO2-Sensor Masimo Neonatal
13307	SpO2-Sensor Masimo Children
13308	SpO2-Sensor Masimo Adult



Barcode Reader



Basket for accessories including cable management



Integrated thermal printer (optional)



Port Overview



Portable Device with an easy to hold handle



Intuitive user interface highly responsive touch screen

# RVS-200

## RIESTER VITAL SIGNS WALL DIAGNOSTIC SYSTEM

The Riester RVS-200 wall diagnostic system is the unique combination of an advanced vital signs monitor and a modular diagnostic station. The highly flexible modular design allows for different configurations, to suit individual needs and reduce instrument complexity.

### Key Features

- Includes all RVS-100 features
- Power supply for up to 3 diagnostic handles
- Maintenance-free HighPerformance LED illumination
- Wide range of EENT ri-scope L instruments
- Integrated Specula dispenser
- Easy and discrete mounting

### Options

- Thermal printer (internal)
- Barcode reader
- WiFi



REF	Description
1961-RRXXE	NIBP (Riester) + SpO2 (Riester)
1961-RRBXE	NIBP (Riester) + SpO2 (Riester) + Pred. Temp
1961-RRBPE	NIBP (Riester) + SpO2 (Riester) + Pred. Temp + Printer
1961-RNXXE	NIBP (Riester) + SpO2 (Nellcor)
1961-RNBXE	NIBP (Riester) + SpO2 (Nellcor) + Pred. Temp
1961-RNBPE	NIBP (Riester) + SpO2 (Nellcor) + Pred. Temp + Printer
1961-RMXXE	NIBP (Riester) + SpO2 (Masimo)
1961-RMBXE	NIBP (Riester) + SpO2 (Masimo) + Pred. Temp
1961-RMBPE	NIBP (Riester) + SpO2 (Masimo) + Pred. Temp + Printer

# RVS-100/200

## RIESTER VITAL SIGNS MONITORS

### Technical Data

#### Monitor

<b>Power Supply:</b>	100 – 240 V AC, 50/60 Hz
<b>Battery:</b>	Lithium-Ion battery, rechargeable, 10.8 V DC, 6,600 mAh, Charging time to a 100%: 6 hours, Operating time approx. 11 hours (new and fully charged battery at 25°C ambient temperature with connected SpO2, Temp, and NIBP on AUTO mode [15 minutes interval]) Low battery indicator Charging battery indicator
<b>Dimensions Monitor:</b>	L x H x W: 303 x 230 x 110 mm [11.93 x 9.05 x 4.33 in]
<b>Weight:</b>	3600 g, (7.94 lb) including temp module, printer,
<b>Dimensions Basket:</b>	L x H x W: 270 x 225 x 200 mm [10.63 x 8.86 x 7.87 in]
<b>Alarm:</b>	Visible LEDs (Yellow, Red, Blue, Green, Orange) Audible Speaker Gives audible alarm, QRS tone Supports Pitch Tone and multi-level volume Alarm tones meet the requirement of IEC 60601-1-8. Alarm Pressure: 45 dB to 85 dB test distance is 1 meter from the tone.
<b>Ports:</b>	1 x AC power inlet 1 x standard RJ45 interfaces.100 BASE-TX, IEEE 802.3 4 x USB ports 1 x Equipotential grounding point 1 x RJ11 connector for nurse call DC out port 15V/1.2 A

#### Clinical-grade NIBP (non-invasive blood pressure)

<b>Measuring method:</b>	automatic oscillometric
<b>Measurement range:</b>	<b>Adult</b> SYS 30 – 270 mmHg, DIA 10 – 220 mmHg, MAP 20 – 235 mmHg <b>Pediatric</b> SYS 30 – 235 mmHg, DIA 10 – 220 mmHg, MAP 20 – 225 mmHg <b>Neonate</b> SYS 30-135 mmHg, DIA 10-110 mmHg, MAP 20-125 mmHg
<b>Cuff pressure range:</b>	0 – 280 mmHg
<b>Resolution:</b>	1 mmHg
<b>Pressure accuracy:</b>	Static ±3 mmHg Clinic ±5 mmHg, standard deviation ≤ 8 mmHg
<b>Pulse rate range:</b>	40 – 240 bpm
<b>Pulse rate accuracy:</b>	1 bpm
<b>Initial inflation pressure:</b>	Adult 160 mmHg, Pediatric 130 mmHg, Neonate 75 mmHg Double overpressure protection (hardware and software) Adult 297 ± 3 mmHg, Pediatric 252 ± 3 mmHg, Neonate 147 ± 3 mmHg
<b>Alarm range:</b>	SYS 0 – 300 mmHg DIA 0 – 300 mmHg MAP 0 – 300 mmHg

# RVS-100/200 RIESTER VITAL SIGNS MONITORS

## Technical Data

<b>Riester SpO2</b>	Measurement range:	0 – 100%	
	Resolution:	1%	
	Accuracy:	±2% (70 to 100%) ±3% (40% to 69%) Unspecified (0% to 39%)	
	Alarm range:	0 – 100%	
	Average time:	4 sec, 8 sec, 16 sec	
	Pulse rate		
	Measurement range:	20 – 250 bpm	
	Resolution:	1 bpm	
	Accuracy:	±1% or ±1 bpm whichever is greater	
	<b>Nellcor SpO2</b>	Measurement range:	0-100%
Resolution:		1%	
Accuracy:		70 – 100%: ±2% (adult, pediatric) 70 – 100%: ±3% (neonate) 0 – 69%: unspecified	
Alarm range:		0 – 100%	
Average time:		8 sec, 16 sec	
Pulse rate			
Measurement range:		20 – 300 bpm	
Resolution:		1 bpm	
Accuracy:		20 – 250 bpm: ±3 bpm 251 – 300 bpm: unspecified	
<b>Masimo SpO2</b>		Measurement range:	0 – 100%
	Resolution:	1%	
	Accuracy:	70 – 100%: ±2% (adult, pediatric, non-motion conditions) 70 – 100%: ±3% (neonate, non-motion conditions) 70 – 100%: ±3% (motion conditions) 0 – 69%: unspecified	
	Average time:	2 – 4 sec, 4 – 6 sec, 8 sec, 10 sec, 12 sec, 14 sec, 16 sec	
	Pulse rate		
	Measurement range:	25 – 240 bpm	
	Resolution:	1 bpm	
	Accuracy:	±3 bpm (non-motion conditions) ±5 bpm (motion conditions)	
	<b>Predictive thermometer</b>		
	• Oral ( Quick Mode )	non-fever temps:	3-5 seconds
	fever temps:	8-10 seconds	
• Oral ( Standard Mode ):		6-10 seconds	
• Axillary Mode:		8-12 seconds	
• Rectal Mode:		10-14 seconds	
• Direct Mode (all sites):		60-120 seconds	
• Measurement accuracy:		35.5°C - 42°C	
	Direct Mode (all sites):	±0.1°C (±0.2°F)	
	Standard Prediction Mode (all sites):	±0.1°C (±0.2°F)	
	Quick Prediction Mode (oral only):	± 0.3°C (±0.5°)	

# ri-vital® SPOT-CHECK VITAL SIGNS MONITOR

## ri-vital® spot-check monitor

Engineered for the mobile and fast recording of vital signs. Clinically validated for adults as well as newborns weighing as little as 1kg (2.2 lb). Simultaneous measurement of different vital signs within seconds.

- **Coloured 4.3" TFT display (SYS, DIA, MAP, pulse, SpO2, Temp, plethysmogram)**
- Temperature alternatively with infrared technology for the ear measurement or with Filac™ 3000 for the oral/rectal measurement including probe dispenser.
- Memory function for measurement readings and infrared interface for thermo printer.
- Options:
  - **External wireless printer**
  - **Filac™ 3000 predictive oral/rectal thermometer**
  - **Ear thermometer**
  - **New mobile stand, brand-new Riester design**
- Shock resistant.
- NIBP with mode for adults and neonates. Washable and disinfectable cuffs with coiled tube, extendable up to 2 m (78.74 in).
- SpO2 sensors with a cable length of 1.2 m (47.24 in) or optional 2.40 m (94.49 in). Optional with PEARL measuring technology for the use with critical patients (e. g. neonates).
- Easy handling via membrane keyboard (disinfectable) and self-explanatory menu.
- Practical storage facilities for accessories (cuffs, sensors, cable, probe covers).
- Efficient and lightweight rechargeable Li-ion battery pack (approx. 250 measurements).
- Portable version or mounted on a stable and smooth running mobile stand with large basket and optional printer holder.
- 2 year warranty, excluding spare parts and accessories.



**Ordering information:**

ri-vital® NIBP, SpO2, bladderless cuffs for adults and large adults, finger sensor for adults	1950-107
ri-vital® NIBP, SpO2, bladderless cuffs for adults and large adults, Finger sensor for adults, ear thermometer	1951-107
ri-vital® NIBP, SpO2, bladderless cuffs for adults and large adults, finger sensor for adults, oral/axillary thermometer	1953-107
ri-vital® NIBP, SpO2, bladderless cuffs for adults and large adults, finger sensor for adults, rectal thermometer	1954-107
ri-vital® NIBP, SpO2, bladderless cuffs for adults and large adults, finger sensor for adults	1955-107
ri-vital® NIBP, PEARL-SpO2, bladderless cuffs for adults and large adults, finger sensor for adults, oral/axillary thermometer	1956-107
ri-vital® NIBP, PEARL-SpO2, bladderless cuffs for adults and large adults, finger sensor for adults, oral/axillary thermometer	1957-107
ri-vital® NIBP, PEARL-SpO2, bladderless cuffs for adults and large adults, finger sensor for adults, rectal thermometer	1958-107
Extension module for infrared printer (holder and printer)	12667
Mobile stand with basket and holder for the mains adapter	12660
Bladderless cuff for neonates	156
Bladderless cuff for infants	158
Bladderless cuff for children	154
Bladderless cuffs for adults with thin arms	160
Bladderless cuffs for adults	150
Bladderless cuffs for large adults	152
Wrap sensor for newborns	12663
Finger sensor for children	12662
Finger sensor for adults	12661
Extension cable for SpO2 length approx. 1,20 m (47.24 in)	12664
Rectal probe 2,7 m (106.3 in)	12668
Oral/axillary probe 2,7 m (106.3 in)	12669
Probe covers for ear thermometer (pack with 100 pcs.)	12704
Probe covers for predictive thermometer (pack of 500 pcs.)	12688
Paper roll for infrared printer (pack with 20 pcs.)	12685
Infrared printer	12687

**Technical data:**

<b>Pulsoximeter:</b>	
Measurement range SpO2:	0..100 % SpO2
Display range:	0..99 % SpO2
Accuracy:	Adults ± 2 % (70-100 %) Children ± 3 % (70-100 %)
Pulse measurement range:	30..250 bpm
Accuracy:	± 1%
<b>Blood pressure:</b>	
Measurement range:	2.. 280 mmHg (systole) 15.. 260 mmHg (MAP) 10.. 220 mmHg (diastole)
Neonates:	20..155 mmHg (systole) 10..130 mmHg (MAP) 5..110 mmHg (diastole)
Overpressure protection:	300 mmHg
<b>Miscellaneous:</b>	
	Independent protection system against excess pressures acc. to EN1060-3
Measurement accuracy:	acc. to EN1060-4:2005
Deviation from average value:	< 5 mmHg
Battery:	ri-accu® L 7.4 V Li-Ion battery
Operation time:	approx. 250 measurements NIBP and SpO2
Charging time:	8 hours
Mains adapter:	AC/DC adapter plug with connector according IEC60320-C13, 100 V-240 V
Basket:	250mm / 9.84 in (L) x 150mm / 5.9 in (W) x 200mm / 7.87 in (H)
Display:	Coloured and illuminated TFT display
Dimension:	without thermometer 203mm / 8 in (L) x 167mm / 6.58 in (W) x 232mm / 9.14 in (H)
Weight:	1500 g / 3.31 lb without thermometer
Casing:	PC and ABS

