

Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm Ventilator Module: 15 x 40 x 15 cm
Weight	9.51 kg (DS: 6.40 kg + VM: 3.11 kg)
Display	15.6 inches, Full HD

Performance Specifications

Patient groups	Preterm neonates to adults (from 300 g of weight)
Modes	VC, PC; VC-CMV, VC-AGC, VC-SIMV, PC-CMV, PC-AGC, PC-SIMV+, PC-BIPAP, SPN-CPAP, VC-MMV, PC-APRV, PS, NIV, nCPAP
Oxygen Therapy	Yes (up to 80 l/min)
Cuff pressure control	Yes
Leakage Compensation	Yes (Manual and Automatic)
Waveforms / Loops	4 waveforms – 4 loops
Functions and Maneuvers	Nebulizer, manual breath, O ₂ flush, standby, sigh, apnea backup, tube compensation, inspiratory hold, expiratory hold, intrinsic PEEP calculation Weaning assessment maneuvers: NIF, P0.1
Nebulizer options	Pneumatic and Ultrasound
Monitoring data	27 monitoring parameters. With Monitoring Module: SpHb, SpCO, SpMet, SpOC, PI, PVI, ORI
Air Source Backup	Yes (Air, O ₂ and turbine drives)
CMV rate	1 – 180 b/min
Tidal Volume	2 – 3000 ml
PEEP/CPAP	0 – 50 cmH ₂ O
Oxygen	21 – 100%
I:E ratio	1:1 – 4:1
Inspiratory Time	0.2 – 15 s
Trigger	20 – -0.5 cmH ₂ O (pressure) 0.1 – 20 l/min (flow)
Pressure support	0 – 50 cmH ₂ O
Oxygen consumption	300 to 600 kPa
Main patient outlet	ISO 22 mm male
Air and oxygen inlets	NIST
Capnometer	Yes (Sidestream - Mainstream)
Gas Analysis	Yes

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity Altitude: Up to 4,000 m
Storage conditions	-10 to +50 °C 35-75% non-condensing humidity
Protection degree	IP54

Electrical and Power Management Specifications

Input Voltage	100-240 VAC
Power Consumption	Max. 210 VA
Batteries	2 (Li-Ion), hot-swappable
Operation time on batteries	Approx. 6 h

Additional Specifications

Available Connections	DVI, USB, SIM, Bluetooth, Ethernet, WLAN
Applicable Standards	ISO 13485:2003, ISO 14971:2012, IEC (IEC 60601-1:2005; EN 60601-1:2006) and EN 60601-1-11:2010), IEC 60601-1-2, EN 80601-2-12, EN 80601-2-55



Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm Monitoring Module: 7.4 x 40 x 14.5 cm
Weight	8.12 kg (DS: 6.40 kg + MM: 1.72 kg)
Display	15.6 inches, Full HD

Performance Specifications

Patient groups	Preterm neonates to adults
ECG	
Leads	3,5,12
Waveforms Display	Up to 12
Measurements	HR, Arrhythmias, ST Segment
Diagnostic software	Hannover ECG System
Printouts	ECG: Real time, Standard and Cabrera reports, HES report
Pulse Oximetry	
Technology	Masimo ® Rainbow SET
Basic Parameters	SpO2, Pulse Rate, PI
Optical Parameters	SpCO, SpMet, SpHb, SpOC, ORI, PVI
Noninvasive Blood Pressure	
Modes	Systolic, Diastolic, MAP, PR, Cuff pressure
Dynamic Pressure Range	-50 mmHg to +300mmHg
Invasive Blood Pressure	
Channels	Up to 4 simultaneous IBP lines
Dynamic Pressure Range	-50 mmHg to +400 mmHg
Temperature	
Channels	2
Range	0.0 °C - 50.0 °C
Capnography	
Capnometer	Yes (Sidestream - Mainstream)
Gas Analysis	Yes
Trends	
Storage	Storage and display of up to 1000 events with date and time stamp
Printouts	Parameters and Trends Report
Connection to Telemetry System	Yes (CMS - HIS)

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity. Altitude: Up to 4,000 m
Storage conditions	-10 to +50 °C. 35-75% non-condensing humidity
Protection degree	IP54

Electrical and Power Management Specifications

Type of protection against electric shock	Class II
Input Voltage	100-240 VAC
Power Consumption	Max. 210 VA
Batteries / Operation time	2 (Li-Ion), hot-swappable / Approx. 6 h

Additional Specifications

Available Connections	DVI, USB, SIM, Bluetooth, Ethernet, WLAN
Applicable Standards	ISO 13485:2003, ISO 14971:2012, IEC (IEC 60601-1:2005; EN 60601-1:2006) and EN 60601-1-11:2010), IEC 60601-1-2, EN 60601-2-27 / EN 80601-2-30, EN 60601-2-34, EN 80601-2-49, EN 80601-2-56, EN 80601-2-61 EN 80601-2-55



Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm Defibrillator Module: 7 (Slim Version) or 8.5 (Paddles Version) x 40 x 15 cm
Weight	Slim Version: 8.12 kg (DS: 6.40 kg + DM: 1.72 kg) Paddles Version: 8.8 kg (DS: 6.27 kg + DM: 2.,53 kg)
Display	15.6 inches, Full HD

**Performance Specifications**

Patient groups	Preterm neonates to adults (from 300g of weight)
Electrodes	Pads, Hard paddles, Internal Paddles
Waveforms Display	Up to 12
ECG Sweep speed	12.5, 25, 50 (mm/sec)
Diagnostic software	Hannover ECG System
Pulse Form	Biphasic energy-triggered, impedance-compensated
Energy and protocol	0,5 to 200 joules, configurable energy protocol
Function Modes	AED, Defibrillation, Pacer, Monitor
Pacing modes	Fix, Demand, Overdrive
Impedance compensation	Yes
Time limit	Yes
Feedback Assistance	Metronome
Modularity	Yes
Monitoring Parameters (With Monitoring Module)	ECG, HR, PR, SpO2, NIBP, IBP (4 lines), Temperature (2 channels) Capnography (mainstream or sidestream) Masimo Optical Parameters: SpHb, SpCO, SpMet, SpOC, PI, PVI

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity Altitude: Up to 4,000 m
Storage conditions	-10 to +40 °C 35-75% non-condensing humidity
Protection degree	IP54

Electrical and Power Management Specifications

Input Voltage	100-240 VAC
Power Consumption	Max. 210 VA
Batteries	2 (Li-Ion), hot-swappable
Operation time on batteries	Manual mode: 400 shocks x 200 J (if ventilator module is paused). AED mode: 400 pre-programmed shocks x 150 J. Noninvasive pacing: 6 hours Monitoring: Approx. 6 hours

Additional Specifications

Available Connections	DVI, USB, SIM, Bluetooth, Ethernet, WLAN
Applicable Standards	ISO 13485:2003, ISO 14971:2012, IEC (IEC 60601-1:2005; EN 60601-1:2006) and EN 60601-1-11:2010), IEC 60601-1-2, EN 60601-2-4

Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm Defibrillator Module: 7 (Slim Version) or 8.5 (Paddles Version) x 40 x 15 cm Monitoring Module: 7.4 x 40 x 14.5 cm
Weight	Slim version: 9.84 kg (DS: 6.40 kg + MM: 1.72 kg + DM: 1.72 kg) Paddles version: 9.98 kg (DS: 6.40 kg + MM: 1.72 kg + DM: 1.86 kg)
Display	15.6 inches, Full HD



Performance Specifications

Patient groups	Preterm neonates to adults (from 300 g of weight)
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Defibrillator

Electrodes	Pads, Hard paddles, Internal Paddles
Waveforms Display	Up to 12
ECG Sweep speed	12.5, 25, 50 (mm/sec)
Diagnostic software	Hannover ECG System
Pulse Form	Biphasic energy-triggered
Energy and protocol	0,5-200 J, configurable energy protocol
Function Modes	AED, Defibrillation, Pacer, Monitor
Pacing modes	Fix, Demand, Overdrive
Impedance compensation	Yes
Time limit	Yes
Feedback Assistance	Metronome
Modularity	Yes

Monitor

ECG leads	3,5, 10
ECG waveforms	Up to 12
ECG Measurements	HR, Arrhythmia, ST segment
Diagnostic Software	Hannover ECG System
Printer	Real time, reports (Standard - Cabrera), HES
NIBP Modes	Systolic, Diastolic, MAP, PR, Cuff pressure
IBP	4 channels
Temperature	2 channels
Capnography	Yes (Mainstream – Sidestream)
Gas Analysis	Yes
Pulse Oximetry	Masimo ® Rainbow SET
Basic Parameters	SpO2, PR, PI
Optical Parameters	SpCO, SpMet, SpHb, SpOC, ORI, PVI

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity. Altitude: Up to 4,000 m
Storage conditions	-10 to +50 °C. 35-75% non-condensing humidity
Protection degree	IP54

Electrical and Power Management Specifications

Type of protection against electric shock	Class II
Input Voltage	100-240 VAC
Power Consumption	Max. 210 VA
Batteries / Operation time	2 (Li-Ion), hot-swappable / Approx. 6 h

Additional Specifications

Available Connections	DVI, USB, SIM, Bluetooth, Ethernet, WLAN
Applicable Standards	ISO 13485:2003, ISO 14971:2012, IEC (IEC 60601-1:2005; EN 60601-1:2006) and EN 60601-1-11:2010), IEC 60601-1-2, EN 60601-2-27 / EN 80601-2-30, EN 60601-2-34, EN 80601-2-49, EN 80601-2-56, EN 80601-2-61 EN 80601-2-55

Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm Ventilator Module: 15 x 40 x 15 cm Monitoring Module: 7.4 x 40 x 14.5 cm
Weight	11.23 kg (DS: 6.40 kg + VM: 3.11 kg + MM: 1.72 kg)
Display	15.6 inches, Full HD

Performance Specifications

Patient groups	Preterm neonates to adults (from 300 g of weight)
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Ventilator

Modes	VC, PC; VC-CMV, VC-AGC, VC-SIMV, PC-CMV, PC-AGC, PC-SIMV+, PC-BIPAP, SPN-CPAP, VC-MMV, PC-APRV, PS, NIV, nCPAP Yes (up to 80 l/min)
Oxygen Therapy	Yes
Cuff pressure control	Yes (Manual and Automatic)
Leakage Compensation	4 waveforms – 4 loops
Waveforms / Loops	Nebulizer, manual breath, O ₂ flush, standby, sigh, apnea backup, tube compensation, inspiratory hold, expiratory hold, intrinsic PEEP calculation
Functions and Maneuvers	Weaning assessment maneuvers: NIF, P0.1 Pneumatic and Ultrasound
Nebulizer options	Yes (Air, O ₂ and turbine drives)
Air Source Backup	Yes (Sidestream - Mainstream)
Capnography	Yes
Gas Analysis	1 - 180 b/min
CMV rate	2 - 3000 ml
Tidal Volume	0 – 50 cmH ₂ O
PEEP/CPAP	21 - 100%
Oxygen	1:1 – 4:1
I:E ratio	0.2 – 15 s
Inspiratory Time	20 - -0.5 cmH ₂ O (pressure)
Trigger	0.1 - 20 l/min (flow)
Pressure support	0 – 50 cmH ₂ O
Oxygen consumption	300 to 600 kPa
Main patient outlet	ISO 22 mm male
Air and oxygen inlets	NIST

Monitor

ECG leads	3,5, 10
ECG waveforms	Up to 12
ECG Measurements	HR, Arrhythmia, ST segment
Diagnostic Software	Hannover ECG System
Printer	Real time, reports
	(Standard - Cabrera), HES
NIBP Modes	Systolic, Diastolic, MAP, PR, Cuff pressure
IBP	4 channels
Temperature	2 channels
Capnography	Yes (Mainstream – Sidestream)
Gas Analysis	Yes
Pulse Oximetry	Masimo © Rainbow SET
Basic Parameters	SpO ₂ , PR, PI
Optical Parameters	SpCO, SpMet, SpHb, SpOC, ORI, PVI

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity. Altitude: Up to 4,000 m
Storage conditions	-10 to +50 °C. 35-75% non-condensing humidity
Protection degree	IP54

Electrical and Power Management Specifications

Type of protection against electric shock	Class II
Input Voltage	100-240 VAC
Power Consumption	Max. 210 VA
Batteries / Operation time	2 (Li-Ion), hot-swappable / Approx. 6 h

Additional Specifications

Available Connections	DVI, USB, SIM, Bluetooth, Ethernet, WLAN
Applicable Standards	ISO 13485:2003, ISO 14971:2012, IEC (IEC 60601-1:2005; EN 60601-1:2006) and EN 60601-1-11:2010), IEC 60601-1-2, EN 80601-2-12, EN 80601-2-55, IEC 60601-1-2, EN 60601-2-27 / EN 80601-2-30, EN 60601-2-34, EN 80601-2-49, EN 80601-2-56, EN 80601-2-61



Physical Specifications

Size	Docking Station: 45 x 40 x 25 cm. Ventilator Module: 15 x 40 x 15 cm Monitoring Module: 7.4 x 40 x 14.5 cm Defibrillator Module: 7 (Slim Version) / 8.5 (Paddles Version) x 40 x 15 cm
Weight	With Slim Version: 12.95 kg (DS: 6.40 kg + VM: 3.11 kg + MM: 1.72 kg + DM: 1.72 kg) With Paddles Version: 13.09 kg (DS: 6.40 kg + VM: 3.11 kg + MM: 1.72 kg + DM: 1.86 kg)
Display	15.6 inches, Full HD

Performance Specifications

Patient groups	Preterm neonates to adults (from 300 g of weight)
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	Ventilator	Monitor	Defibrillator
Modes	VC, PC; VC-CMV, VC-AGC, VC-SIMV, PC-CMV, PC-AGC, PC-SIMV+, PC-BIPAP, SPN-CPAP, VC-MMV, PC-APRV, PS, NIV, nCPAP	ECG -Leads -Waveforms -Measurements	Electrodes Waveforms Display ECG Sweep speed Diagnostic software Pulse Form Energy & protocol
Oxygen Therapy	Yes (up to 80 l/min)	3,5, 10 Up to 12 HR, Arrhythmia, ST segment	Up to 12 12.5, 25, 50 (mm/sec)
Cuff pressure control	Yes	Hannover ECG System	Hannover ECG System
Leakage	Yes (Manual and Automatic)	Real time, reports (Standard - Cabrera)	Biphasic energy-triggered
Compensation		HES	0,5-200 J, configurable energy protocol
Waveforms / Loops	4 waveforms – 4 loops	NIBP Modes	Function Modes
Functions and Maneuver	Nebulizer, manual breath, O ₂ flush, standby, sigh, apnea backup, tube compensation, inspiratory hold, expiratory hold, intrinsic PEEP calculation. Weaning assessment maneuvers: NIF, P0.1	Systolic, Diastolic, MAP, PR, Cuff pressure	AED, Defibrillation, Pacer, Monitor
Nebulizer options	Pneumatic and Ultrasound	IBP	Pacing modes
Air Source Backup	Yes (Air, O ₂ and turbine drives)	4 channels	Impedance compensation
Capnography	Yes (Sidestream - Mainstream)	2 channels	Time limit
Gas Analysis	Yes	Yes (Mainstream - Sidestream)	Feedback
CMV rate	1 - 180 b/min	Gas Analysis	Assistance
Tidal Volume	2 - 3000 ml	Pulse Oximetry	Modularity
PEEP/CPAP	0 - 50 cmH ₂ O	Basic Parameters	
Oxygen	21 - 100%	Optical Parameters	
I:E ratio	1:1 - 4:1		
Inspiratory Time	0.2 - 15 s		
Trigger	20 - -0.5 cmH ₂ O (pressure) 0.1 - 20 l/min (flow)		
Pressure support	0 - 50 cmH ₂ O		
Oxygen consumption	300 to 600 kPa		
Main patient outlet	ISO 22 mm male		
Air and oxygen inlets	NIST		

Environmental Specifications

Operation conditions	-20 to +50 °C, 35-75% non-condensing humidity. Altitude: Up to 4,000 m
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