

# HAMILTON-T1

## Technical specification for SW version 3.1.x

### Ventilation modes

Standard: ✓ Option: ○ Not applicable: --

Mode form	Mode name	Mode	Adult/Ped	Neonatal
Volume-targeted modes, adaptive pressure controlled	APVcmv / (S)CMV+	Breaths are volume targeted and mandatory.	✓	✓
	APVsimv / SIMV+	Volume-targeted mandatory breaths can be alternated with pressure-supported spontaneous (patient-triggered) breaths.	✓	✓
Pressure-controlled modes	PCV+	All breaths, whether triggered by the patient or the ventilator, are pressure controlled and mandatory.	✓	✓
	PSIMV+	Mandatory breaths are pressure controlled. Mandatory breaths can be alternated with pressure-supported spontaneous (patient-triggered) breaths.	✓	✓
	DuoPAP	Mandatory breaths are pressure controlled. Spontaneous breaths can be triggered at both pressure levels.	○	○
	APRV	Spontaneous breaths can be continuously triggered. The pressure release between the levels contributes to ventilation.	○	○
	SPONT	Every breath is spontaneous, with or without pressure support.	✓	✓
Intelligent ventilation	ASV	Operator sets %MinVol, PEEP, and oxygen. Rate, tidal volume, inspiratory pressure, and I:E ratio are based on physiological input from the patient.	✓	--
Noninvasive modes <sup>1</sup>	NIV	Every breath is spontaneous.	○	○
	NIV-ST	Every breath is spontaneous as long as the patient is breathing above the set Rate. A backup Rate can be set for mandatory breaths.	○	○
	nCPAP	Demand flow nasal continuous positive airway pressure.	--	○
	nCPAP-PC	Breaths are pressure controlled and mandatory.	--	○

<sup>1</sup> When the NIV-only option is installed and enabled, only noninvasive modes and features are supported. All invasive modes are disabled.

## Standard configuration and options (in alphabetical order)

Standard: ✓ Option: O Not applicable: --

Functions	Adult/Ped	Neonatal
Capnography, mainstream (volumetric) and sidestream	O	O
Communication board:	O	O
CO <sub>2</sub> , CO <sub>2</sub> /Nurse Call/COM1, CO <sub>2</sub> /SpO <sub>2</sub> /COM1 <sup>2</sup> , CO <sub>2</sub> /SpO <sub>2</sub> /Humidifier & COM1 <sup>2,3</sup>		
Communication protocols. For details, see the <i>HAMILTON Communication Interface User Guide'</i> (PN 627052)	O	O
CPR ventilation	✓	✓
Dynamic Lung	✓	--
Event log (up to 10,000 events with date and time stamp)	✓	✓
Hamilton Connect Module (connectivity) <sup>4</sup>	O	O
HAMILTON-H900 humidifier integration	O	O
High flow oxygen therapy (HiFlowO <sub>2</sub> )	O	O
IntelliSync®+ (inspiratory and expiratory trigger synchronization) <sup>5</sup>	O	--
IntelliTrig (leak compensation)	✓	✓
Languages (English, US English, Chinese, Croatian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Turkish, Ukrainian)	✓	✓
Manual breath/prolonged inspiration	✓	✓
Mounting options (trolley, carrying case, and a variety of wall, bed, ceiling, and shelf mounts)	O	O
NBC filter compatibility (only for HAMILTON-T1 MIL PN 161009)	O	O
Nebulization, pneumatic	✓	--
Night vision compatibility (NVG)	O	O
NIV-only	O	--
O <sub>2</sub> enrichment	✓	✓
On-screen help	✓	✓
Patient group	✓	O
Print screen	✓	✓
RJ-45 Ethernet port <sup>6</sup>	✓	✓
Screen lock	✓	✓
Second battery	O	O

<sup>2</sup> Applies only to devices with serial number > 3000.

<sup>3</sup> Only available with the HAMILTON-H900 Y-cable.

<sup>4</sup> Available for HAMILTON-T1 PN 1610060 and 1610090.

Available for the HAMILTON-T1 PN 161006, 161009 with SN > 3000 and higher with the Hamilton Connect Module (HCM) Upgrade kit.

<sup>5</sup> Available for HAMILTON-T1 PN 1610060 and 1610090.

<sup>6</sup> Only available for use if the Hamilton Connect module is activated.

Functions	Adult/Ped	Neonatal
Speak valve compatibility	○	--
SpO2 monitoring	○	○
Standby with timer	✓	✓
Suctioning tool	✓	--
Trends/Loops	○	○
USB port	✓	✓
Vent Status (visual representation of patient's ventilator dependence)	✓	✓

## Technical performance

Description	Specification
Automatic expiratory base flow	<i>Adult/Ped:</i> Fixed at 3 l/min <i>Neo:</i> Fixed at 4 l/min
Inspiratory pressure	0 to 60 cmH <sub>2</sub> O
Maximum limited pressure	60 cmH <sub>2</sub> O
Maximum working pressure	<i>Adult/Ped:</i> 60 cmH <sub>2</sub> O (total inspiratory pressure); ensured through pressure limiting <i>Neo:</i> 45 cmH <sub>2</sub> O (limitation depending on frequency)
Maximum inspiratory flow	260 l/min (120 l/min with 100% O <sub>2</sub> )
Means of inspiratory triggering	Flow trigger control
Minimum expiratory time	20% of cycle time; 0.2 to 0.8 seconds
Minute volume capability	Up to 60 l/min
Oxygen mixer accuracy	± (volume fraction of 2.5% + 2.5% of actual reading)
Tidal volume	<i>Adult/Ped:</i> 20 to 2000 ml <i>Neo:</i> 2 to 300 ml
Preoperational checks	Leak test, flow sensor/circuit/O <sub>2</sub> sensor calibration, CO <sub>2</sub> sensor zero calibration <sup>7</sup>
Display device	Display of settings, alarms, and monitored data <i>Type:</i> Color TFT <i>Size:</i> 640 x 480 pixels, 8.4 in (214 mm) diagonal
Brightness setting for display	The range is 10% to 100% brightness. By default, Day = 80%; Night = 40%.
Brightness with NVG option	The range is 1 to 10. The default is 5.
Alarm volume (loudness) <sup>8</sup>	The range is 1 to 10. The default setting is 5.
Sound power level <sup>9</sup>	51 dB(A) ± 3dB(A)
Sound pressure level <sup>9</sup>	43 dB(A) ± 3dB(A)

<sup>7</sup> CO<sub>2</sub> option required.

<sup>8</sup> Volume at 1 meter distance from ventilator. A setting of 1 = 62 dB(A), 5 = 76 dB(A), and 10 = 85 dB(A), with accuracy of ±3 dB(A).

<sup>9</sup> Per ISO 80601-2-12.

## Approvals

Description	Specification
Classification	Class IIb according to Regulation (EU) 2017/745, Annex VIII
Declaration	The HAMILTON-T1 was developed in accordance with pertinent international standards and FDA guidelines. The ventilator is manufactured under a QMS system as required by EN ISO 13485, ISO 9001, and article 10(9) of Regulation (EU) 2017/745. The ventilator meets the general safety and performance requirements according to Regulation (EU) 2017/745, Annex I.
Electromagnetic compatibility	Class B according to IEC 60601-1-2:2014
Safety class	Class II, Type BF applied part (ventilator breathing system, VBS, CO2 sensor including CO2 module connector, and SpO2 sensor including adapter), continuous operation according to IEC 60601-1

## Pneumatic performance

Component	Specifications	
High-pressure oxygen inlet	Pressure: 2.8 to 6 bar / 41 to 87 psi	
	Flow: Maximum of 200 l/min	
	Connector: DISS (CGA 1240) or NIST	
Low-pressure oxygen inlet	Pressure: Maximum 6 bar / 87 psi	
	Flow: $\leq 15$ l/min	
	Connector: Quick-coupling system, compatible with Colder Products Company (CPC) PMC series	
Air supply	Integrated blower	
Gas mixing system	Delivered flow	
		<ul style="list-style-type: none"> <li>&gt; 260 l/min <math>\pm 10\%</math> against ambient pressure (at sea level)</li> <li>&gt; 200 l/min with 100% oxygen</li> </ul>
	Delivered pressure:	<i>Adult/Ped</i> : 0 to 60 cmH <sub>2</sub> O <i>Neo</i> : 0 to 45 cmH <sub>2</sub> O
	Flow accuracy:	$\pm 10\%$ or $\pm 300$ ml/min (whichever is greater)
Inspiratory outlet ( <i>To patient</i> port)	Connector: ISO ID15/OD22 conical	
Expiratory outlet ( <i>From patient</i> port)	Connector (on expiratory valve): ISO ID15/OD22 conical	

## Electrical specifications

Element	Specifications
Input power	100 to 240 VAC, 50/60 Hz  12 to 28 VDC (total range 10.2 to 30.3 VDC)
Power consumption	50 VA typical, 150 VA maximum
Battery	Hamilton Medical provides a high-capacity battery <sup>10</sup> . An optional second battery is available.  Electrical specifications: 10.8 VDC, 6.7 Ah, 72 Wh  Type: Lithium-ion, supplied by Hamilton Medical only  Recharge time: While the ventilator is connected to primary power, approximately 3.25 h to fully recharge one battery, approximately 6.25 h to fully recharge two batteries.  Storage: -20°C to 60°C, ≤ 85% relative humidity. The storage location should be free from vibration, dust, direct sunlight, moisture, and corrosive gases, and with a recommended temperature range < 21°C.  Extended exposure to temperatures above 45°C can degrade battery performance and life.  Normal operating time: Typically 4 hours with one battery, 8 hours with two batteries.  Operating times are measured with one or two fully charged battery, the blower in use, without communication board, and with the following settings: Mode = PCV+, Rate = 10 l/min, ΔPcontrol = 10 cmH <sub>2</sub> O, I:E = 1:4, PEEP = 5 cmH <sub>2</sub> O, Flow trigger = 5 l/min, FiO <sub>2</sub> = 40%.  Approximate operating times under these conditions are as follows: <ul style="list-style-type: none"> <li>• One battery, display brightness = 80%: 4 h</li> <li>• One battery, display brightness = 20%: 4.5 h</li> <li>• Two batteries, display brightness = 80%: 8 h</li> <li>• Two batteries, display brightness = 20%: 9.25 h</li> </ul> This operating time applies to new, fully charged Li-ion batteries that have not been exposed to extreme temperatures. The actual operating time depends on battery age and on how the battery is used and recharged.

## Graphical patient data

Graphic type/tab name	Options
Waveforms	Pressure, Volume, Flow, PCO <sub>2</sub> <sup>11</sup> , FCO <sub>2</sub> <sup>11</sup> , Plethysmogram <sup>12</sup> , Capnogram <sup>11</sup>
Intelligent panels	Dynamic Lung <sup>13</sup> , Vent Status, ASV Graph <sup>14</sup>
Trends	1-, 6-, 12-, 24-, or 72-h trend data for a selected parameter or combination of parameters
Loops	Pressure/Volume, Pressure/Flow, Volume/Flow, Volume/PCO <sub>2</sub> <sup>11</sup> , Volume/FCO <sub>2</sub> <sup>11</sup>

<sup>10</sup> PN 369108, revision 4 and later.

<sup>11</sup> CO<sub>2</sub> option required.

<sup>12</sup> SpO<sub>2</sub> option required.

<sup>13</sup> Only for adult/pediatric patients.

<sup>14</sup> Only in ASV mode.

## Alarms

Priority	Alarm
High priority	Apnea, Blower fault, Buzzer defective, Check flow sensor, Check flow sensor tubing, Check patient interface, Device temperature high, Disconnection on patient/ventilator side, Exhalation obstructed, ExpMinVol high/low, External flow sensor failed, Flow sensor calibration needed (during ventilation), High Pressure during Sigh, Loudspeaker defective, Minute volume high/low, Obstruction, Options not found, Oxygen high/low, Oxygen supply failed, Pressure high/low, Pressure not released, Replace O2 sensor, Self test failed, Vent outlet temperature high Battery 1,2: Defective, Battery 1,2: Temperature high, Battery communication error, Battery low, Battery power loss, Battery totally discharged SpO2: <sup>15</sup> SpO2 low
Medium priority	Battery low, Check for blockage, Check flow sensor for water (Neo), Circuit calibration needed, External connections disabled <sup>16</sup> , Fan failure, Flip the flow sensor, Frequency high/low, fTotal high/low, Function key not operational, High Flow, High PEEP, Inspiratory volume limitation, Loss of PEEP, Performance limited by high altitude, Pressure limitation, Real-time clock failure, Vt high/low, Wrong expiratory valve CO2: <sup>17</sup> PetCO2 high/low SpO2: <sup>15</sup> SpO2: Adapter missing, SpO2: Light interference, SpO2: Low perfusion index, SpO2: Patient disconnected, SpO2: Poor signal, SpO2: Probe missing, SpO2: Sensor error, PI low/high, Pulse low/high, PVI low/high, SpO2 low
Low priority	Apnea ventilation/Apnea ventilation ended, ASV: Cannot meet the target, Blower service required, Check Plimit, Check settings, CPR ON, Flow sensor calibration needed (in Standby), Invalid communication board, IRV (inverse ratio ventilation), JTAG not working, Loss of external power, Maximum leak compensation, Pressure limit has changed, Pressure limitation, Preventive maintenance required, Release valve defective, Replace HEPA filter, SpeakValve ON/OFF, Suctioning maneuver, Touch not functional, Wrong expiratory valve Battery 1,2: Calibration required, Battery 1,2: Replacement required, Battery 1,2: Wrong battery, Battery low O2 sensor calibration needed, O2 sensor defective, O2 sensor missing, O2 sensor not system compatible CO2: <sup>17</sup> CO2 calibration needed, CO2: Poor signal, CO2 sensor disconnected, CO2 sensor faulty, CO2 sensor over temperature, CO2 sensor warmup, Check CO2 airway adapter, Check CO2 sampling line SpO2: <sup>15</sup> SpO2 high

<sup>15</sup> If the SpO2 option is installed and enabled.

<sup>16</sup> If the Hamilton Connect module is installed and enabled.

<sup>17</sup> If the CO2 option is installed and enabled.

## Control settings and ranges

Parameter (units)	Range Adult/Ped <sup>18</sup>	Range Neonatal <sup>18</sup>
%MinVol (%) <sup>19</sup>	25 to 350	--
Apnea backup	On, Off	On, Off
ETS (%) <sup>20,21</sup>	5 to 80 <i>NIV-only: OFF<sup>22</sup> / 5-80</i>	5 to 80
Flow (l/min) <sup>23</sup>	2 to 100 <sup>24</sup>	2 to 30
I:E <sup>25</sup>	1:9 to 4:1	1:9 to 4:1
IBW (kg) ( <i>calculated</i> )	3 to 139	--
Oxygen (%)	21 to 100	21 to 100
P high (cmH <sub>2</sub> O) (in APRV)	0 to 60	0 to 45
P high (cmH <sub>2</sub> O) (in DuoPAP)	0 to 60	3 to 45
P low (cmH <sub>2</sub> O) (in APRV)	0 to 35	0 to 25
Pat. height		
(cm)	30 to 250	--
(in)	12 to 98	
PEEP/CPAP (cmH <sub>2</sub> O)	0 to 35	3 to 25
Plimit (cmH <sub>2</sub> O)	5 to 60	5 to 45
P-ramp (ms) <sup>26</sup>	0 to 2000 <i>ASV, NIV, NIV-ST, SPONT: max = 200</i>	0 to 600 <i>NIV, NIV-ST, SPONT, nCPAP-PC: max = 200</i>
Rate (b/min) <sup>27</sup>	1 to 80 <i>APVcmv, PCV+: 4 to 80</i> <i>PSIMV+, NIV-ST: 5 to 80</i>	1 to 80 <i>PSIMV+: 5 to 80</i> <i>APVcmv, PCV+, PSIMV+PSync, nCPAP-PC, NIV-ST, APVsimv + Apnea backup: 10 to 80</i>
Set temp (°C)	INV: 35 to 41 NIV: 30 to 35 HiFlowO <sub>2</sub> : 33 to 37	INV: 35 to 41 NIV: 30 to 35 HiFlowO <sub>2</sub> : 33 to 37
Sex	Male, Female	--
Sigh	On, Off	--
SpeakValve	On, Off	--

<sup>18</sup> Parameter settings and ranges can vary depending on the selected mode.

<sup>19</sup> Only in ASV mode.

<sup>20</sup> Expiratory trigger sensitivity, in % of inspiratory peak flow.

<sup>21</sup> When selecting a noninvasive mode, the device uses the ETS value used in the previous mode, if available. If the previous mode did not use ETS, the device sets ETS to default values.

<sup>22</sup> ETS can be set to OFF only in the *niv-only* option. The ability to set ETS to OFF can be disabled. For details, contact your Hamilton Medical technical representative.

<sup>23</sup> Only for high flow oxygen therapy.

<sup>24</sup> In some markets, the maximum possible Flow setting may be limited.

<sup>25</sup> In PCV+, (S)CMV+, and APVcmv modes, mandatory breath timing can be controlled by using a combination of inspiratory time (TI) and Rate, or by the I:E ratio; set the method in Configuration. All other modes are controlled by using a combination of inspiratory time (TI) and Rate.

<sup>26</sup> P-ramp is limited to one-third (1/3) of TI time. Adjustment of TI time can override the P-ramp setting.

<sup>27</sup> Startup setting derived from IBW (adult/pediatric), body weight setting (neonatal). Does not apply in ASV mode.

Parameter (units)	Range Adult/Ped <sup>18</sup>	Range Neonatal <sup>18</sup>
T gradient (°C)	-2 to 3	-2 to 3
T high <sup>27</sup> (s) (in APRV and DuoPAP)	0.1 to 40.0	0.1 to 40.0
T low (s) (in APRV)	0.2 to 40.0	0.2 to 40.0
TI (s) <sup>27</sup>	0.1 to 12.0	0.1 to 12.0
TI max (s)	0.5 to 3.0	0.25 to 3.0
Trigger, expiratory	ETS, IntelliSync+ <sup>28</sup>	ETS
Trigger, flow (l/min) <sup>29</sup>	0.5 to 20.0 APVcmv, PCV+: 0.5 to 20.0 / Off	0.1 to 5.0 APVcmv, PCV+: 0.1 to 5.0 / Off
Trigger, inspiratory	Flow trigger, IntelliSync+ <sup>28</sup>	Flow trigger
Vt (ml)	20 to 2000	2 to 300
Vt/IBW	5 to 12	5 to 12
Vt/Weight (ml/kg) <sup>30</sup>		
Weight (kg)	--	0.2 to 30.0
$\Delta P_{control}$ (cmH <sub>2</sub> O) <sup>31</sup>	5 to 60	3 to 45 <i>nCPAP-PC</i> : 0 to 45
$\Delta P_{insp}$ (cmH <sub>2</sub> O) <sup>31</sup>	3 to 60	3 to 45
$\Delta P_{support}$ (cmH <sub>2</sub> O) <sup>31</sup>	0 to 60	0 to 45

<sup>28</sup> Not available in all markets.

<sup>29</sup> Flow trigger is leak compensated.

<sup>30</sup> IBW is calculated using height and sex, for adult and pediatric patients. Actual body weight is used for neonates.

<sup>31</sup>  $\Delta P_{control}$ : Control pressure, added to PEEP/CPAP.  $\Delta P_{insp}$ : Inspiratory pressure, added to PEEP/CPAP.  $\Delta P_{support}$ : Pressure support, added to PEEP/CPAP.

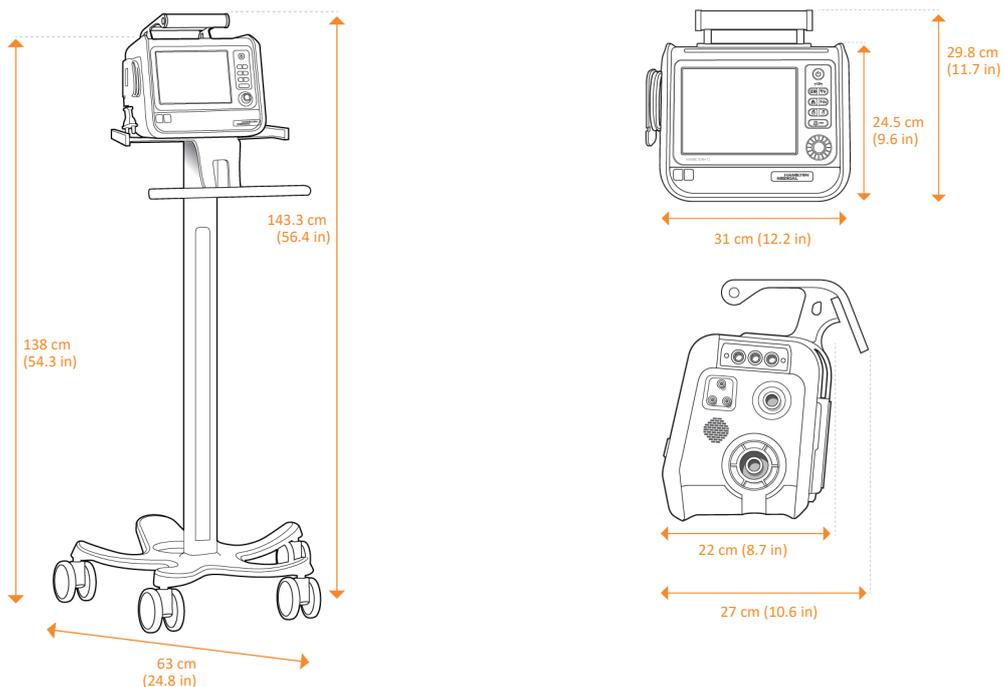
## Monitoring parameters

Parameter (units)	Description	
Pressure	AutoPEEP (cmH <sub>2</sub> O)	Unintended positive end-expiratory pressure
	PEEP/CPAP (cmH <sub>2</sub> O)	PEEP (positive end-expiratory pressure) and CPAP (continuous positive airway pressure)
	Driving pressure, ΔP (cmH <sub>2</sub> O)	Driving pressure, calculated value reflecting the difference between P <sub>plateau</sub> and PEEP
	ΔP <sub>insp</sub> (cmH <sub>2</sub> O)	Inspiratory pressure
	P <sub>mean</sub> (cmH <sub>2</sub> O)	Mean airway pressure
	P <sub>peak</sub> (cmH <sub>2</sub> O)	Peak airway pressure
	P <sub>plateau</sub> (cmH <sub>2</sub> O)	Plateau or end-inspiratory pressure
	P <sub>prox</sub> (cmH <sub>2</sub> O)	Airway pressure at proximal patient interface
Flow	Flow (l/min)	HiFlowO <sub>2</sub> : The set flow of gas to the patient nCPAP: The average flow updated every second nCPAP-PC: The average flow during expiration, updated every breath
	Insp Flow (peak) (l/min)	Peak inspiratory flow, spontaneous or mandatory
	Exp Flow (peak) (l/min)	Peak expiratory flow
	Volume	ExpMinVol or MinVol NIV (l/min)
MVSpont or MVSpont NIV (l/min)		Spontaneous expiratory minute volume
VTE or VTE NIV (ml)		Expiratory tidal volume
VTESpont (ml)		Spontaneous expiratory tidal volume
VTI (ml)		Inspiratory tidal volume
VLeak (%)		Leakage percent or total minute volume leakage
MVLeak (l/min)		Leakage percent or total minute volume leakage
Vt/IBW or Vt/Weight (ml/kg)		Tidal volume is calculated by ideal body weight (adult/pediatric patients) or actual body weight (neonatal patients)
Oxygen	Oxygen (%)	Oxygen concentration of the delivered gas
	O <sub>2</sub> consumption (l/min)	The current oxygen consumption rate
Time	CPR timer	MMP during CPR ventilation showing duration of CPR ventilation
	I:E	Ratio of the patient's inspiratory time to expiratory time for every breath cycle
	fControl (b/min)	Mandatory breath frequency
	fSpont (b/min)	Spontaneous breathing frequency
	fTotal (b/min)	Total breathing frequency
	TI (s)	Inspiratory time
	TE (s)	Expiratory time

Parameter (units)	Description	
Lung mechanics	Cstat (ml/cmH2O)	Static compliance
	P0.1 (cmH2O)	Airway occlusion pressure
	PTP (cmH2O*s)	Pressure time product
	RCexp (s)	Expiratory time constant
	Rinsp (cmH2O / (l/s))	Inspiratory flow resistance
	RSB (1 / (l*min))	Rapid shallow breathing index
CO2	FetCO2 (%)	Fractional end-tidal CO2 concentration
	PetCO2 (mmHg)	End-tidal CO2 pressure
	slopeCO2 (%CO2/l)	Slope of the alveolar plateau in the PetCO2 curve, indicating the volume/flow status of the lungs
	Valv (l/min)	Alveolar minute ventilation
	Vtalv (ml)	Alveolar tidal ventilation
	VCO2 (ml/min)	CO2 elimination
	VDaw (ml)	Airway dead space
	VDaw/VTE (%)	Airway dead space fraction at the airway opening
	VeCO2 (ml)	Exhaled CO2 volume
	ViCO2 (ml)	Inspired CO2 volume
SpO2	SpO2 (%)	Oxygen saturation
	Pulse (1/min)	Pulse
	SpO2/FiO2 (%)	The SpO2/FiO2 ratio (%) is an approximation of the PaO2/FiO2 ratio, which, in contrast to PaO2/FiO2, can be calculated noninvasively and continuously
	OSI	Oxygen saturation index
	PI (%)	Perfusion index
	PVI (%)	Pleth variability index
Humidifier <sup>32</sup>	T Y-piece (°C)	Measured temperature at the Y-piece
	T humidifier (°C)	Measured temperature at water chamber exit

<sup>32</sup> If HAMILTON-H900 humidifier integration is enabled, and a humidifier is connected and turned on.

## Physical characteristics



Dimension	Specifications
Weight	6.5 kg (14.3 lb) 18.5 kg (40.8 lb) with trolley The trolley can accommodate a maximum safe working load <sup>33</sup> of 44 kg (97 lb).
Dimensions	See figures above
Monitor	Type: Color TFT Size: 640 x 480 pixels, 8.4 in (214 mm) diagonal
Trolley accessories	HAMILTON-H900 mounting kit, optional O <sub>2</sub> bottle holding system, optional tubing support arm, water bottle holder, basket
<b>Gas cylinder</b>	
Diameter	100 to 140 mm (3.9 to 5.5 inches)
Height	≤ 820 mm (32 inches)
Weight	≤ 8 kg (17.6 lb)

<sup>33</sup> The maximum safe working load applies to a stationary, properly load-balanced trolley.









Hamilton Medical AG  
Via Crusch 8, 7402 Bonaduz, Switzerland  
☎ +41 58 610 10 20  
info@hamilton-medical.com  
www.hamilton-medical.com

Distributor in USA:  
Hamilton Medical, Inc.  
201 Edison Way, Unit A  
Reno, NV 89502-2305 US  
☎ +1 800-426-6331  
info@hamiltonmedical.com  
**www.hamilton-medical.com**

10103182/04  
2024-09-30

Specifications are subject to change without notice. Some features are options. Not all features/products are available in all markets. For all proprietary trademarks and third-party trademarks used by Hamilton Medical AG, see [www.hamilton-medical.com/](http://www.hamilton-medical.com/) trademarks. © 2024 Hamilton Medical AG. All rights reserved.