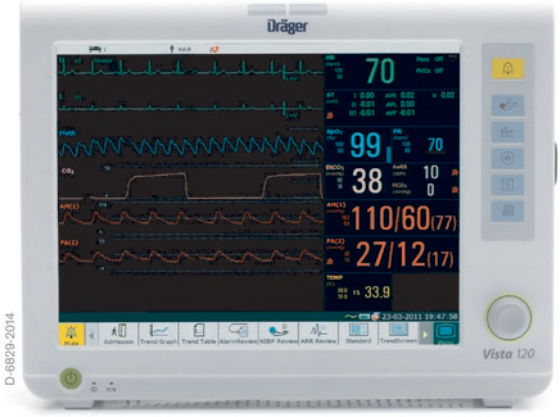
Vista 120
Patient Monitoring Solution

Hospitals have a common challenge: provide the best care possible in an environment where patient populations are growing, financial constraints are increasing and caregivers are overburdened. Dräger offers a patient monitor to meet the clinical needs in these environments: the Vista 120.

380 mm (15") TFT touch screen
High resolution display (1,024 x 768) is bright and easy to read, even from a distance

Networking capabilities
Enables central monitoring

Configurable layout
Lets you see the information you want, the way you want to see it



Core set of essential parameters
3/5 lead ECG, SpO_2, non-invasive blood pressure, respiration and dual temperature

Enhanced trending
- Stores up to 120 hours of trend data for all parameters in tabular and graphic formats
- Stores up to 1,200 NIBP measurements and 60 alarm events

Anesthesia support
Displays data from Scio Four gas measurement modules

Alarms
Alarm indicator and alarm pause/off

Shortcut keys
Fast access to main functions

Benefits

Essential monitoring capabilities, exceptional value

The Vista 120 displays up to eleven waveforms in an easy-to-configure layout and offers a core set of essential parameters including 3/5 lead ECG, non-invasive blood pressure, respiration and dual temperature comes standard. Advanced parameters including two invasive blood pressures, Mainstream etCO_2 and Cardiac Output are also available.

Clear view of patient data

The Vista 120 has a 380 mm (15") color touchscreen display that offers easy viewing of up to eight channels.

Supports workflow efficiently and cost-effectively

The Vista 120 is easy to learn and easy to use. You can configure the display to see the information you want to see, the way you want to see it. Fast access keys and simplified menus put the data you need right at your fingertips.

Built-in recorder

The Vista 120 has an integrated recorder that prints out up to three channels of information – saving time by providing documentation when and where you need it.

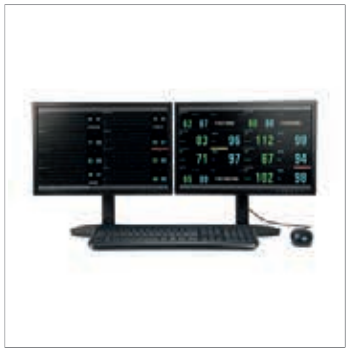
Standard built-in gas interface

The Vista 120 provides seamless connectivity to Dräger Scio anesthetic gas measurement modules delivering precise inspiratory and expiratory values.

Dräger heritage of quality

At Dräger, every life is unique. Protecting, supporting and saving lives is the foundation of our company philosophy. Our goal is to provide product and solutions that support acute care, help improve patient outcomes, reduce costs and achieve greater overall patient satisfaction.

Related Products



D-68804-2012

Vista 120 Central Monitoring System

The easy-to-use Vista 120 Central Monitoring System (CMS) lets you centrally monitor the vital signs of up to 64 patients connected to Vista 120/Vista 120 S bedside monitors. This central surveillance streamlines workflow for clinicians, while significantly increasing patient safety.

Technical Data

SUPPORTED PARAMETERS

ECG

Lead mode	3-lead wire: I, II, III 5-lead wire: I, II, III, aVR, aVL, aVF, V
Waveform	3-lead wire: 1-channel waveform 5-lead wire: 2-channel waveform, max. seven waveforms
Lead naming style	AHA, IEC
Display sensitivity	1.25 mm/mV (x0.125), 2.5 mm/mV (x0.25), 5 mm/mV (x0.5), 10 mm/mV (x1), 20 mm/mV (x2), AUTO gain
Sweep	6.25, 12.5, 25, 50 mm/s
Bandwidth (-3dB)	Diagnosis: 0.05 to 150 Hz Monitor: 0.5 to 40 Hz Surgery: 1 to 20 Hz
CMRR (Common Mode Rejection Ratio)	Diagnostic: > 95 dB Monitor: > 105 dB Surgery: > 105 dB
Notch	50 Hz/60 Hz (Notch filter can be selected manually)
Differential input impendance	> 5 MΩ
Input signal range	±8 mV_{PP}
Electrode offset potential tolerance	±500 mV
Auxiliary current (Leads off detection)	Active electrode: < 100 nA Reference electrode: < 900 nA
Input offset current	≤ 0.1μA
Recovery time after defibrillation	< 5 s (measured without electrodes as IEC60601-2-27:2011, Sect. 201.8.5.5.1 requires.)
Leakage current of patient	< 10 μA
Scale signal	1 mV_{PP}, accuracy is ±5
System noise	< 30 μV_{PP}
ESU protection	Cut mode: 300 W Coagulation mode: 100 W Recovery time: ≤ 10 s
ESU noise suppression	Tested according to the test method in ANSI/AAMI EC13-2002: Sect. 5.2.9.14, it accords with the standard
Minimum Input Slew Rate (Lead II)	> 2.5 V/s

Pace pulse

Pulse indicator	Pulse is marked if the requirements of IEC 60601-2-27: 2011, Sect. 201.12.1.101.12 are met: Amplitude: ±2 mV to ±700 mV Width: 0.1 ms to 2.0 ms Ascending time: 10 μs to 100 μs
Pulse rejection	Pulse is rejected if the requirements of IEC 60601-2-27: 2011, Sect. 201.12.1.101.13 are met: Amplitude: ±2 mV to ±700 mV Width: 0.1 ms to 2.0 ms Ascending time: 10 μs to 100 μs

Heart rate

Range	ADU: 15 to 300 bpm PED/NEO: 15 to 350 bpm
Accuracy	±1% or ±1 bpm, whichever is greater
Resolution	1 bpm
Sensibility	≥ 300 μV_{PP}

Technical Data

PVC	
Range	ADU: 0 to 300 PVCs/min PED/NEO: 0 to 350 PVCs/min
Accuracy	1 PVCs/min or 2% of measurement, whichever is greater
Resolution	1 PVCs/min
ST value	
Range	-2.0 to 2.0 mV
Accuracy	-0.8 mV to +0.8 mV: ±0.02 mV or 10%, whichever is greater.
Resolution	0.01 mV
HR averaging method	
Method 1	Heart rate is computed by excluding the minimum and maximum values from the 12 most recent RR intervals and averaging the residual 10 RR intervals.
Method 2	If each of three consecutive RR intervals is greater than 1,200 ms, then the four most recent RR intervals are averaged to compute the HR.
Range of sinus and SV rhythm	
Tachycardia	Adult: RR interval for 5 consecutive QRS complex ≤ 0.5 s. Pediatric/neonatal: RR interval for 5 consecutive QRS complex ≤ 0.375 s.
Normal	Adult: 0.5 s < RR interval for 5 consecutive QRS complex < 1.5 s. Pediatric/neonatal: 0.375 s < RR interval for 5 consecutive QRS complex < 1 s.
Bradycardia	Adult: RR interval for 5 consecutive QRS complex ≥ 1.5 s. Pediatric/neonatal: RR interval for 5 consecutive QRS complex ≥ 1 s.
Range of ventricular rhythm	
Ventricular tachycardia	The interval of 5 consecutive ventricular complexes is less than 600 ms
Ventricular rhythm	The interval of 5 consecutive ventricular complexes ranges from 600 ms to 1,000 ms
Ventricular bradycardia	The interval of 5 consecutive ventricular complexes is higher than 1,000 ms
Startup time for tachycardia	
Ventricular tachycardia 1 mV 206 bpm	Gain 0.5: 10 s Gain 1.0: 10 s Gain 2.0: 10 s
Ventricular tachycardia 2 mV 195 bpm	Gain 0.5: 10 s Gain 1.0: 10 s Gain 2.0: 10 s
Response time of heart rate meter to change in HR	HR range: 80 to 120 bpm Range: Within 11 s HR range: 80 to 40 bpm Range: Within 11 s
Tall T-wave rejection	Complied with IEC 60601-2-27: 2011, Sect. 201.12.1.101.17 minimum recommended 1.2 mV T-Wave amplitude
Accuracy of heart rate meter and response to irregular rhythm	Complied with IEC 60601-2-27: 2011, Sect. 201.7.9.2.9.101 b) 4). The HR value after 20 s:

Technical Data

	Ventricular bigeminy: 80 ±1 bpm Slow alternating ventricular bigeminy: 60 ±1 bpm Rapid alternating ventricular bigeminy: 120 ±1 bpm Bidirectional systoles: 91 ±1 bpm
Respiration	
Method	Impedance between RA-LL, RA-LA
Baseline impedance range	200 Ω to 2,500 Ω (with ECG cables of 1 KΩ resistance)
Measuring sensitivity	Within the baseline impedance range: 0.3 Ω
Waveform bandwidth	0.2 to 2.5 Hz (-3 dB)
RR measuring and alarm range:	Adult: 0 to 120 rpm Neo/Ped: 0 to 150 rpm
Resolution	1 rpm
Accuracy	Adult: 6 rpm to 120 rpm: ±2 rpm 0 rpm to 5 rpm: not specified Neo/Ped: 6 rpm to 150 rpm: ±2 rpm 0 rpm to 5 rpm: not specified
Gain selection	x0.25, x0.5, x1, x2, x3, x4, x5
NIBP	
Method	Oscillometric
Mode	Manual, Auto, Continuous
Measuring interval in auto mode	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, and 480 min
Continuous	5 min, interval is 5 s
Measuring type	Systolic Pressure, Diastolic Pressure, Mean Pressure
Alarm type	SYS, DIA, MAP
Measuring and alarm range	
Adult mode	SYS: 40 to 270 mmHg DIA: 10 to 215 mmHg MAP: 20 to 235 mmHg
Pediatric mode	SYS: 40 to 230 mmHg DIA: 10 to 180 mmHg MAP: 20 to 195 mmHg
Neonatal mode	SYS: 40 to 135 mmHg DIA: 10 to 100 mmHg MAP: 20 to 110 mmHg
Cuff pressure measuring range	0 to 300 mmHg
Pressure resolution	1 mmHg
Maximum standard deviation	8 mmHg
Maximum measuring period	
Adult/Pediatric	120 s
Neonate	90 s
Typical measuring period	20 to 35 s (depend on HR/motion disturbance)
Overpressure protection	
Adult	297 ±3 mmHg
Pediatric	240 ±3 mmHg
Neonatal	147 ±3 mmHg
PR	
Measuring range	40 to 240 bpm
Accuracy	±3 bpm or 3.5%, whichever is larger

Technical Data

SpO_2	
Measuring range	0 to 100%
Resolution	1%

Accuracy	
Adult (including Pediatric)	±2% (70 to 100% SpO_2)
	Undefined (0 to 69% SpO_2)
Neonate	±3% (70 to 100% SpO_2)
	Undefined (0 to 69% SpO_2)

PI	
Measuring Range	0–10, invalid PI value is 0.
Resolution	1

Pulse rate	
Pulse rate measuring range	25 to 300 bpm
Alarm range	30 to 300 bpm
Accuracy	±2 bpm

Nellcor Module	
Measuring Range	1% to 100%
Alarm Range	20% to 100%
Resolution	1%
Data update period	1s
Accuracy (70% to 100% SpO_2):	
DS-100A, OXI-A/N(Adult)	±3%
OXI-A/N(Neonate)	±4%
D-YS (Infant to Adult)	±3%
D-YS (Neonate)	±4%
D-YS with D-YSE Ear Clip	±3.5%
MAX-FAST	±2%

Pulse Rate	
Measuring Range	20 to 300 bpm
Resolution	1 bpm
Accuracy	3 bpm (20 to 250 bpm)
Sensor Wave length	approximately 660 and 900nm
Emitted light energy	<15 mW
NOTE: Information about the wave length range can be especially useful to clinicians (for instance, when photodynamic therapy is performed).	

Temperature	
Channels	2
Measuring and alarm range	0 to 50°C (32 to 122°F)
Sensor type	YSI 10 k
Resolution	±0.1°C (0.1°F)
Accuracy (without sensor)	±0.1°C
Refresh time	Every 1 to 2 s

IBP	
Accuracy	±2% or ±1 mmHg, whichever is greater
Resolution	1 mmHg

Technical Data

Pressure sensor	
Sensitivity	5 (μV/V/mmHg)
Impedance range	300 Ω to 3,000 Ω
Filter	DC~ 12.5 Hz; DC~ 40 Hz
Zero	Range: ±200 mmHg

Measuring and alarm range	
Art	0 to 300 mmHg
PA	-6 to 120 mmHg
CVP/RAP/LAP/ICP	-10 to 40 mmHg
P1/P2	-50 to 300 mmHg

CO_2	
Method	Infra-red absorption technique
Unit	mmHg, %, kPa

Measuring range	
$etCO_2$	0 to 150 mmHg
$FiCO_2$	3 to 50 mmHg
AwRR	0 to 150 rpm (Mainstream)

Resolution	
$etCO_2$	1 mmHg
$FiCO_2$	1 mmHg
AwRR	1 rpm
$etCO_2$ accuracy	±2 mmHg, 0 to 40 mmHg ±5% of reading, 41 to 70 mmHg ±8% of reading, 71 to 100 mmHg ±10% of reading, 101 to 150 mmHg
AwRR accuracy	±1 rpm
Apnea alarm delay	10, 15, 20, 25, 30, 35, 40 s, default value is 20 s
Calculation method	BTPS (Body Temperature Pressure Saturated)

Stability	
Short term drift	Drift over 4 hours < 0.8 mmHg
Long term drift	Accuracy specification will be maintained over 120 hours

O_2 compensation	
Range	0 – 100%
Resolution	1%
Default	16%

C.O.	
Intended patient	Adult
Measurement method	Thermodilution Technique

Measuring range	
C.O.	0.1 L/min ~ 20 L/min
TB	23°C ~ 43°C
TI	-1°C ~ 27°C

Resolution	
C.O.	0.1 L/min
TB, TI	±0.1°C

Technical Data

Accuracy	
C.O.	±5% or 0.2 L/min, whichever is greater
TB	0.1°C (without sensor)
TI	0.1°C (without sensor)

Trend review	
Short	1 hr, 1 s. resolution
Long	120 hrs, 1 min. resolution
Review	1200 sets NIBP measurement data
NOTE: Regarding the AG specifications, refer to the Supplement Scio Four modules.	

Recorder	
Record width	48 mm (1.9 inch)
Paper speed	12.5, 25, 50 mm/s
Trace	Up to 3 waveforms
Recording types	– Continuous real-time recording – 8 seconds real-time recording – Time recording – Alarm recording – Trend graph recording – Trend table recording – NIBP review recording – Arrhythmia review recording – Alarm review recording – C.O. measurement recording – Frozen waveform recording – Drug calculation titration recording – Hemodynamic Calculation result recording

Display specifications	
Display screen	380 mm (15 inch) color TFT
Resolution	1024 x 768
Maximum number of waveforms	11
Indicator LEDs	1 power, 2 alarm, 1 charge

Physical specification	
Size (H x W x D)	316 x 408 x 157 mm (12.4 x 16.1 x 6.2 inch)
Weight	7.0 kg (15.4 lbs)

Electrical specification	
Power supply	100 V – 240 V~, 50 Hz/60 Hz
Pmax	110 VA
FUSE	T 3.15 AH, 250 V

Classification	
Anti-electroshock type/protection class	Class I equipment and internal powered equipment
EMC type	Class A
Anti-electroshock degree	CF: ECG (RESP), TEMP, IBP, CO BF: SpO_2, NIBP, CO_2, AG
Liquid ingress protection	IPX1
Disinfection/sterilization method	Refer to Instructions for Use: Care and cleaning
Mode of operation	Continuous running equipment
Power supply	100 V to 240 V~, 50 Hz/60 Hz Pmax = 110 VA

Technical Data

	FUSE T 3.15 AH, 250 VP
Battery (optional)	
Quantity	1
Capacity	5,000 mAh
Battery Life	240 min (At 25±2°C, with (a) new fully charged battery/batteries, continuous SpO_2 measurement and NIBP automatic measurement mode at interval of 15 minutes, Dräger ECG/TEMP module connected, recording at interval of 10 minutes, brightness set to "1")
Battery Charge time	≤ 360 min, 100% charge (Monitor is on or in standby mode) ≤ 324 min, 90% charge (Monitor is on or in standby mode)

ENVIRONMENTAL REQUIREMENTS

The monitor may not meet the performance specifications given here if stored or used outside the specified temperature and humidity ranges. When the monitor and related products have differing environmental specifications, the effective range for the combined products is that range which is common to the specifications for all products.

Temperature range	
Operating	0 to 40°C (32 to 104°F)
Transport and storage	-20 to 55°C (-4 to 131°F)
Relative humidity	
Operating	15%RH ~ 95%RH (non-condensing)
Transport and storage	15%RH ~ 95%RH (non-condensing)
Atmospheric pressure	
Operating	86 kPa ~ 106 kPa
Transport and storage	70 kPa ~ 106 kPa

Standards

IEC 60601-1: 2005+A1 :2012; IEC 60601-1-2: 2007; EN 60601-1: 2006+A1 :2013; EN 60601-1-2: 2007; IEC 60601-2-49: 2011
The Vista 120 monitors comply with the Medical Device Directive (MDD) 93/42/EEC.

VISTA 120	MS30214	MS31997	MS31996	MS31998
3/5-lead wire ECG	X	X	X	X
Draeger SpO_2	X		X	
Nellcor SpO_2		X		X
Non-Invasive Blood Pressure	X	X	X	X
Respiration	X	X	X	X
Dual Temperature	X	X	X	X
Built-in Recorder	X	X	X	X
Networking	X	X	X	X
Gas Mesurement Module Compatibility	X	X	X	X
2 Invasive Blood Pressures			X	X
Cardiac Output			X	X
$etCO_2$			X	X

Vista 120 monitors are available in select markets only.
For availability in your area, please contact the appropriate Dräger office from those listed below.

Notes

Notes

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