

Technical Specification for Fukuda Denshi VaSera VS-2000 (Quantity: 1)

Description: The VaSera VS-2000 is the clinically validated reference standard equipment for assessment of ankle branchial index and related measures of arterial stiffness. It non-invasively and simultaneously captures pulse waves in all four limbs, and calculates blood pressures and a validated arterial stiffness index. This makes it possible to examine the arterial stiffness and degree of blood circulation disorders in blood vessels in the lower limbs of the patient.

Technical Specifications: The VaSera VS-2000 device is to be supplied in the following configuration

S.No	Description	Comply / Not Comply	Reference Page No.
1)	<ul style="list-style-type: none">• Fukuda Denshi Vasera VS-2000 with the following accessories, viz.<ul style="list-style-type: none">a) Four limb BP packageb) ECG software package		
2)	<ul style="list-style-type: none">• Measurements to be supported<ul style="list-style-type: none">a) Simplified Cardio-Ankle Vascular Index (CAVI)b) Ankle-Brachial Index (ABI)c) Toe Brachial Index (TBI)d) Standard 12 Lead ECG		

- In addition to the above, the supplied device should conform to the detailed specifications as provided in the table below.

S.No	Specification			Comply / Not Comply	Reference Page No.
1.	Display	LCD display	1024 x 768 dots (LED back light)		
2.	PCG	Frequency response	L filter: 50 Hz (-6 dB/oct) PWV filter: 165 ~ 280Hz within -3dB		
3.	NIBP (BPU-100)	Measuring range	0 ~ 300mmHg		
		Scale interval	1 mmHg		
		Pressure accuracy	±3mmHg		
		Pressure detection	Semiconductor pressure sensor		
		Zero balancing	Automatic balancing		
		Measuring method	Oscillometric		
		NIBP measuring range	20 ~ 280mmHg		
		Inflation method	Automatic inflation by pump		
		Deflating method	Automatic by electromagnetic valve		
	Safety device	Over 330mmHg, or 10mmHg for longer than 130sec			
4.	ECG (EE-100)	Leads	Standard 12-lead ECG		
		Standard sensitivity	10 mm/mV		
		Sensitivity changes	1/4, 1/2, 1, 2, auto		
		Differential and common mode offset voltage (electrode-skin voltage)	±600mV or more		
		Sine wave characteristics	0.05 ~ 150Hz within -3dB		
		Low frequency characteristics (time constant)	3.2s or more		
		CMRR	103dB or more		
		Internal noise	<30 μVp-p		
		Filters	AC: 50 / 60Hz (-20dB max)		
			Muscle: 25 / 35Hz -3dB (-6dB/oct)		

			Drift: 0.25Hz/0.5Hz within -3dB		
		SD card slot	SD Card Specification 2.0		
		LAN connector	IEEE 802.3u, 100BASE-TX (cable within 50m)		
		USB connector	USB2.0 Full Speed, 3 channel		
		Safety standard	IEC 60601-1: 1999		
		Class of protection against electric shock	Class I, internally-powered equipment		
		Type of protection against electric shock	NIBP input : Type CF (defibrillation-proof)		
			PCG input : Type CF (defibrillation-proof)		
			ECG input : Type CF (defibrillation-proof)		
		Power supply	100 ~ 240V AC 50/60Hz, 120 VA		
			DC11.1V Battery operation)		
5.	Dimension and Weight	Main Unit	178 (W) x 181 (D) x 315 (H) mm		
			0.58 (W) x 0.59 (D) x 1.03 (H) feet		
			Approx. 4.5kg (10lbs) (without Battery)		
		Display Unit	297 (W) x 95.5 (D) x 210 (H) mm		
			0.97 (W) x 0.31 (D) x 0.69 (H) feet		
			Approx. 1.6kg (3.5lbs)		
		BPU-100	90 (W) x 151.1 (D) x 43 (H) mm		
			0.29 (W) x 0.45 (D) x 0.14 (H) feet		
			Approx. 0.4kg (0.9lbs)		
6.	Operating environments	Temperature	10~40°C (50~104°F)		
		Humidity	25~95% (non-		

		condensing)		
7.	Storage environments	Temperature -10~+60°C (14~140°F)		
		Humidity 10~95% (non-condensing)		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)