Technical Specifications of Advance Electro-Surgical Generator with Vessel Sealing for CTVS				
S.N.	**Purchasers Specification**	**Bidders Compliance Sheet**		
		Yes/No	**Page no. in Datasheet**	**Remarks**
	Manufacturer:			
	Brand:			
	Type / Model:			
	Country of Origin:			
1	**Technical Specifications**			
1	An integrated system with 300 - 350W output generator and a single touch screen for Monopolar, Bi-Polar and Vessel Fusion integrated in one generator.			
2	The system must be micro-processor controlled which should identify the tissue type with a feedback of at least 430000 -500000 times/second on real time basis, and adjust the power to get the desired surgical effect on the tissue			
	Control panel for monopolar,bi-polar and vessel fusion integrated in one generator with single touch screen for customizable digital setting and display of power.			
3	System should have 2 monopolar output, 1 bi-polar output and 1 vessel sealing output.			
4	The Monopolar output must have Cut, Blend, “Haemostasis with division(HWD)”, Soft Coag, Fulgurate and Spray mode			
5	The Bi-Polar must have Low, Medium and High mode with Auto Bi-Polar Control.			
6	System should have separate monopolar, bipolar & Vessel Sealing Foot Pedal.			
7	The system should have one different Vessel Fusion output which should be able to seal artery, veins along with tissue bundle up to and including 7mm in diameter, and fused vessels should be able to withstand more than 3 times of normal systolic blood pressure.(authentic certificate to be produced or sheen in the catalog/data sheet)			
8	The Vessel seal system should be of 300 - 350W at a rated load of 20 ohms.			
9	The vessel sealing system should have simple audio visual feedback display from the generator. This should include:			
10	System should have System Error Indicator			
11	System should have System status indicators such as Self test, ready for use, ready for sealing/seal cycle complete, sealing in process			
12	System should offer reliable sealing with minimal thermal spread			
13	System should offer precise dissection & controlled coagulation minimizing tissue damage.			
14	System should have usage limit indicator & instruments status indicator.			
15	The vessel sealing system should support open and laparoscopic hand instruments			
16	The vessel sealing hand instruments should have cutting independent of sealing.			
17	There should be an option of enabling or disabling the footswitches.			
18	The system should have demo mode facility and recall facility to recall the last setting used by user.			
19	Selectable range of bi-polar cut initation.			
20	Should have six combination of cutting and coagulation settings			
21	Should be compatible with Resect scope of standard company.			
22	System should have features as standaard to ensure safe energy delivery by monitoring the quality of the electrode - tissue interface to eliminate the risk of patient burn enhancing the high level of patient safety & reducing surgical risks.			
23	Footswitch shall be splash proof and unaffected by common OR fluid spills, easy to clean, have suitable mechanical protection against accidental peadal depression and switches shall not be susceptable to sticking in the "ON"position.			
24	System should have audio-visual alarm facility, to indicate any breakage of direct contact between the patient and patient plate.			
25	All open surgery including head and neck and thyroid can be precisely controlled with very less thermal spread by using sealing technique.			
24	Integrated seal with choice of cut 10mm and 5mm should be present.			

25	System should have 5 mm vessel sealing electrical instrument with Blunt tip for dissection and faster procedure.			
27	Both Footswitch and Hand Control mode should be available.			
28	System should have both re-usable open surgical instruments for Vessel Sealing purpose.			
29	System should be Compatible with Argon Coagulator and Smoke Evacuator			
30	The system should be upgradable and should have RS232, USB, Ethernet port for on field software downloads, upgrades and serviceability.Any update or upgrade shall be free of cost .			
31	Shall have Over Current Protection and No Leakage Current.			
2	**Accessories to be Supplied as Standard :**			
	a) Monopolar/Bipolar/Vessel Sealing footswitch .- 02 Pcs each			
	b) Monopolar pencils with Hand Control - 25 Pcs			
	c) Re-usable Patient Plate - 03 Pcs.			
	c) Disposable Patient Plate - 25 Pcs			
	d) Bipolar Forceps Staright with Cord , Microtip, 15cm - 03 Pcs			
	e) Bipolar Forceps Straight , Macrotip , 20cm - 03 Pcs.			
	f)Universal adaptor- 02 Pc			
	g) Open small Jaw seal and cut instrument with hand switch activation capability - 03 Pcs.			
	h) Laparoscopic Maryland Jaw seal and cut instrument with hand activation capability-03 Pcs.			
	i)Bipolar Resection Foot Switch & Cable - 02Pcs.			
	j) Instruments for Vessel Sealing Open Surgery - 03 Pcs.			
	k) Laproscopic Instruments for vessel sealing , 5mm - 03 Pcs.			
3	**Operating Environment**			
3.1	The product offered shall be designed to be stored and operate normally under the conditions of the purchaser's country.The conditions include power supply, climate, temperature, humidity etc			
3.2	Power Supply: 220-240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 meters in length.			
4	**Standards & Safety Requirements**			
4.1	Must submit valid ISO 13485:2012 for Medical Devices AND			
4.2	Must submit valid European CE and USFDA certificate.			
5	**Training**			
5.1	The supplier shall conduct user training to end users and service training to electro-biomedical staff's. The training shall include the use of all operational functions of the equipment as well as routine checks, and maintenance expected by the users.			
6	**Warranty**			
6.1	Comprehensive warranty of 2 years after Installation and acceptance.			
6.2	During the warranty period supplier must ensure planned preventive maintenance (PPM) at least 4 times a year and corrective/breakdown maintenance whenever required.			
7	**Installation and Commissioning**			
7.1	The supplier must accomplish proper installation and commissioning of equipment onsite. Any prerequisites for installation to be communicated to purchaser in advance,in detail.			
8	**Documentation**			
8.1	User (Operating) manual in English and technical data sheet should be provided.			
8.2	Service (Technical / Maintenance) manual in English.			
8.3	List of important spare parts and accessories with the part number and costing.			
8.4	Certificate of calibration and inspection from factory.			
8.5	Authorization Letter from Manufacturer should be provided.			
8.6	Bidder should provide original Brochure and any manipulation in the brochure is not strictly entertained and imprinting of published specification in the brochure will be disqualified without any observation.			

Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number in the catalogue of all the required parameters must be clearly mentioned and highlighted. Failure in doing so may lead to rejection of bid from technical committee.