

**DATA SHEET**

**HLL BIOTECH LIMITED, CHENNAI**

<b>nne pharmaplan®</b>	<b>REVIVAL OF DPT VACCINE MANUFACTURING FACILITY, PII, COONOOR</b>		 <b>HLL BIOTECH LIMITED</b> <small>(Subsidiary of HLL Lifecare Limited)          (A Government of India Enterprise)</small>
	<b>Peristaltic Pump</b>		
	<b>Project No :</b>	<b>110831</b>	
	<b>Equipment ID :</b>	<b>PTP 01</b>	
	<b>Document No :</b>	<b>DS-PTP 01</b>	

**1 Process requirements**

1.1	It is used dispense the thimersal at required amount.
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**2 Technical Specifications**

2.1	Model	cGMP compliant
2.2	Type	Portable type, with variable speed
2.3	Flow rate range	10 ml/ min - 18000 ml/ min (Client to confirm)
2.4	Display (RPM)	3 Digit, LED
2.5	Speed regulation (accuracy)	± 0.25 %
2.6	Dimension (L x W x H) in mm	to be confirmed by vendor
2.7	Suction axis	Horizontal
2.8	Tube sizes (Internal/External)	TBD
2.9	Operating temperature	5 °C–40 °C
2.10	Relative humidity	10–90 %
2.11	Displacement	Positive
2.12	Rotor Speed	0.1 - 400 rpm
2.13	Pump head	Single, should be compatible with siliocon tubings
2.14	Operation	Continuous
2.15	Pressure Range	20-40 psi
2.16	IP rating	IP 55/ IP 66
2.17	Motor direction	Clockwise and counter clock wise
2.18	Shipping Weight	Vendor to specify
2.19	Electricity Consumption	<i>Vendor to specify</i>
2.20	Dimension (L x W x H) in mm	Vendor to specify
2.21	Quantity	1 nos

**3 Material of Construction**

3.1	Main body	SS
3.2	Rollers, Pump case, Shaft, Bracket	SS
3.3	Tube	Platinum cured silicon tubing USP Class VI compliant

**4 Specific requirements**

4.1	Package should include (not limited) pump, pump head and 3 meters each of required sizes of platinum cured silicone tubing
4.2	The supplied pump head should accept multiple tubing sizes and operate to deliver the required minimum and maximum volumes
4.3	Pump for continuous operation and pumping of process fluid along with metering the volume of fluid
4.4	Microprocessor controlled with soft-touch keypad and with easy-to-read LCD Screen along with LED light display to show the mode of the pump.

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4.5	Digital variable speed based pump drives; Stepper motor drive for uniform rpm digital variable speed
4.6	Digital speed setting, reversible flow, programmable pump
4.7	Pump speed should not vary with power fluctuations (Near pulseless flow)

**5 Other requirements**

5.1	Should be certified as water tight
5.2	The equipment must be easy to clean, all external surface of the equipment and pump head should be easily disinfected with standard disinfectant such as 70 % IPA.
5.3	All bolts, nuts on the exterior part of equipment should be with cap head or cap nut.
5.4	Manual/ analog/ digital RS 232 control required

**6 Regulatory aspects**

6.1	NA
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**7 Safety requirements**

7.1	Pump head should be covered with the safety enclosure
7.2	In event of equipment malfunction or loss of utilities, the unit must contain all necessary protection devices that the equipment and the product remain in a safe condition.
7.3	Noise level should be less than 75 decibel at 1 meter distance.

**8 Documents**

<b>Following documents, but not limited to these, are expected from the vendor as part of the supply package in hard copy as well as editable electronic file</b>	
8.1	IOQ Protocol.
8.2	Operation and maintenance manuals shall be provided along with IQ and OQ documents during installation at site
8.3	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.
8.4	All equipment warranty should be valid for one year from the date of completion.
8.5	Vendor should provide list of standard spare parts with ordering information.
8.6	Vendor should provide list of change parts (if applicable) with ordering information

**9 Timelines**

Not Applicable	
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		AFI Approved for Enquiry		AFO Approved for Ordering		
00	2015-10-21	NRU	PULM	<input type="checkbox"/>	<input type="checkbox"/>	
Rev	Date	Completed By	Checked By	AFI	AFO	Sheet 1/2

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**TABLE NO: 1**

<b>Equipment ID</b>	<b>Block Name</b>	<b>Room Name</b>	<b>Room No</b>	<b>Room dimension in</b>	<b>Room height in mm</b>
B1-THD 01	Diphtheria	Toxoid Concentration	B1G060	4800 x 6510	3000

	<b>AFI Approved for Enquiry</b>		<b>AFO Approved for Ordering</b>			
00	2015-10-21	NRU	PULM	<input type="checkbox"/>	<input type="checkbox"/>	
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