






DATA SHEET			
HLL LIFECARE LIMITED, CHENNAI			
nne pharmaplan®	REVIVAL OF BCG VACCINE LABORATORY, GUINDY, CHENNAI		
	REFRIGERATOR		
	PROJECT No:	110729	
	EQUIPMENT ID :	BF-RFG 03_06	
	DOCUMENT No :	DS/BF-RFG 02	
1	Process requirements		
1.1	It is used to store the media chemicals and Buffer Storage required for the process.		
2	Technical Specifications		
2.1	Model	cGMP Refrigerator with glass door in upper chamber and stainless steel door in lower compartment	
2.2	Refrigerator compartment	300 L or near to standard	
2.3	External dimension (W X D X H mm)	600 x 750 x 2000 or near to standard	
2.4	Internal dimension (W X D X H mm)	500 x 550 x 1500 or near to standard	
2.5	Shelves (W X D mm)	vendor to specify	
2.6	Height between the shelves (mm)	vendor to specify	
2.7	No. of Shelves	vendor to specify (SS 304 Perforated shelves shall be adjustable)	
2.8	Purpose	Media chemicals and Buffer Storage	
2.9	Temperature Range	+1°C to +8°C	
2.10	Refrigrant	R134a (HFC refrigerant) or vendor to specify	
2.11	Temperature precision	± 0.5 deg C	
2.12	Temperature precision (setting resolution)	± 1 deg C	
2.13	Temperature uniformity	± 2 deg C	
2.14	Air circulation	Forced air circulation	
2.15	Quantity	4no.s	
3	Material of construction		
3.1	Body Construction	Interior	SS 304
		Shelves	Perforated, SS304
		Exterior	Powder coated GI sheet or vendor to specify
3.2	Gaskets, seals, o-rings	Food Grade/ nontoxic material Use of Asbestos is prohibited	
3.3	Insulation	Heavy walled CFC Free	
3.4	Door	Double layer Borosilicate glass in upper chamber and Stainless steel door for lower chamber	
3.5	MOC Fan	Aluminium	
3.6	All welds shall be ground finish		
4	Specific requirements		
4.1	Chamber should be rounded corners for easy cleaning.		
4.2	System shall be designed for 100% coverage of the internal surface areas for manual cleaning.		
4.3	The vendor shall provide the detail of cleaning agent based on compatibility of material.		
4.4	The refrigerators shall be provided with adjustable shelves for flexible storage.		
4.5	Refrigerator shall be fitted with double-roll lockable caster wheels for easy transportation.		
4.6	The control shall be microprocessor based with digital display cum controller.		
4.7	Key lock for Parameter change Protection to be provided.		
4.8	Temperature to be recorded, monitored and displayed. Temperature probe installed in freezer (Two nos).		
4.9	Temperature controlling must be based on set point.		
4.10	Provision/ device to be provided to monitor the equipment through Wireless device & to transfer the data from the equipment and also USB port to be provided for getting the batch data[Non editable]		
4.11	Paper less data logger to be provided		





DATA SHEET						
HLL LIFECARE LIMITED, CHENNAI						
		REVIVAL OF BCG VACCINE LABORATORY, GUINDY, CHENNAI				
		REFRIGERATOR				
		PROJECT No:	110729			
		EQUIPMENT ID :	BF-RFG 03_06			
		DOCUMENT No :	DS/BF-RFG 02			
4.12	A complete batch record indicating the following important parameters, but not limited to these: a) Date, Time b) Infrared port (for optional data transmission) c) All failures and alarms					
4.13	Internal clock to be maintained to retrieve data at setpoint interval i.e.; 24 hrs .					
4.14	Positive air circulation by internal fans must be provided to ensure temperature uniformity and recovery					
4.15	Temperature sensor for set temperature					
4.16	Alarms for parameters like high temperature, low temperature shall be provided.					
4.17	Temperature set points should be adjustable.					
4.18	Alarm if door is open for >5 min.					
4.19	Light on/ off in case of glass door.					
4.20	Auto switch off of fan when door opens.					
4.21	Automatic defrost cycle and melt water evaporation in heated tray should be provided.					
4.22	Dry contact for remote alarm should be provided.					
4.23	1 no. Door lock should be provided.					
4.24	Spring loaded, self closing door with 90° angle stay open feature should be provided with holder.					
4.25	Both the chambers shall have independent cooling system, controller, and power					
4.26	Ring back function if any alarm condition remains active					
5	<b>Other requirements</b>					
5.1	A CE declaration of conformity must be available. The CE Identification must comply with the current EC instructions.					
5.2	Cleaning shall be done manually					
5.3	Control lights and other display elements shall not be influenced by voltage failure					
5.4	Installation of equipment with refrigerants has to be done by a certified cooling technician.					
5.5	The control circuit has to be 24 Volt					
5.6	Audio alarms have to be in the range of 2.3 — 2.9 kHz in order to avoid interference and confusion with evacuation alarms					
6	<b>Regulatory guidelines / standards</b>					
	NA					
7	<b>Safety requirements</b>					
7.1	Emergency stop function on accessible area.					
7.2	Noise level below 75 decible.					
7.3	Proper earthing					
7.4	No sharp edges/Corners, crevices, pin holes in the process wetted parts of the equipment.					
7.5	In the event of equipment malfunction or loss of utilities, the unit must contain all necessary protection devices to ensure that the equipment and the product remain in a safe condition.					
8	<b>Documents</b>					
8.1	FDS Document (If applicable)					
8.2	Technical Specifications					
8.3	MOC certificates					
8.4	IQ protocol					
8.5	CE Certificate					
8.6	List of alarms					
8.7	Comprehensive 1 year warranty letter from date of supply.					
9	<b>Timelines</b>					
	NA					
	<b>NOTE:</b> Accurate size and technical specification need to be mentioned by the vendor					
	AFI Approved for Enquiry			AFO Approved for Ordering		
5	2013-12-18	BKSH	VKKA	<input type="checkbox"/>	<input type="checkbox"/>	
Rev	Date	Completed By	Checked By	AFI	AFO	Sheet 1 / 2

DATA SHEET						
HLL LIFECARE LIMITED, CHENNAI						
nne pharmaplan®	REVIVAL OF BCG VACCINE LABORATORY,GUINDY,CHENNAI					
	REFRIGERATOR					
	PROJECT No:		110729			
	EQUIPMENT ID :		BF-RFG 03_06			
	DOCUMENT No :		DS/BF-RFG 02			
	ROOM LOCATION:					
	1	Room no: BF016[1no.] ,BF037[3no.s]				
	2	FALSE CEILING: 3000mm				
5	2013-12-18	BKSH	VKKA	<input type="checkbox"/>	<input type="checkbox"/>	
Rev	Date	Completed By	Checked By	AFI	AFO	Sheet 2 / 2