## **ANNEX 2: TECHNICAL REGULATION**

No.	Name	Quantity	Technical specifications and standards	
1	Phototherapy	20 pcs	I. GENERAL INFORMATION	
			Year of production: from 2021, 100% new	
			Manufacturer meets international quality standards Quality	
			certificates: ISO 13485: 2016	
			Power:100-240VAC, 47/63Hz	
			Operating ambient temperature:	
			- Temperature: +10°C to +35°C	
			- Humidity: 0% to 90% RH non-condensing	
			- Atmospheric pressure: 70-106kPa	
			Transport and Storage:	
			- Temperature: 0°C to +50°C	
			- Humidity: 0% to 90% RH non-condensing	
			- Atmospheric pressure: 70-106kPa	
			II. ORDERING INFORMATION	
			1. Phototherapy: 01	
			2. Bassinet: 01	
			3. Adaptor 12V: 01	
			4. Power cable: 01	
			5. Eyepatch: 05	
			6. Gel mattress: 01	
			7. User Manual: 01 III. DETAILED SPECIFICATIONS:	
			1. General description:	
			Overall	
			- Compact form fits in mother's bed	
			- Handholds facilitate easy portability	
			- Curved surfaces for easy cleaning	
			- Tight seams to prevent dirt build-up, sealed to keep out	
			bugs, dust, and liquids	
			- Smart heatsink, no internal fans	
			Top Light	
			- Fixed at the most clinically effective height	
			- Slim form for easy infant observation	
			- Curved top prevents placement of objects	
		,	- Aluminum heat sink with plastic cap to protect both ends	
			- 01 set of lights with 16 high-power LEDs (3w/bulb)	

No.	Name	Quantity	Technical specifications and standards
			Bottom Light  - Durable thick-walled ABS plastic  - The aluminum bottom is tilted to increase the efficiency of the machine's heat dissipation  - 01 set of lights with 16 high-power LEDs (3w/bulb)  Bassinet  - Removable for infant transport  - Smooth surface for quick wipe-down  - Soft edges to protect infant during placement
			- Clear scratch-resistant plastic for easy observation
			<ul> <li>Control Panel</li> <li>Single power button controls both lights</li> <li>Treatment hours display</li> <li>Total device hours display</li> <li>Performance Specifications:</li> </ul>
			Type of LEDs: Philips LUXEON high-powered blue Peak wavelength: 455 to 470 nm Lamp duration: 60,000 hours Average spectral irradiance    Top light 34.8 μW/cm²/nm    Bottom light 50.4 μW/cm²/nm Effective surface area    Top light: 53 cm x 24 cm    Bottom light: 48 cm x 20 cm Irradiance uniformity ratio    Top light 0.51 (IEC Compliant > 0.4)    Bottom light 0.72 (IEC Compliant > 0.4)  3. Display parameters    Treatment hours display    Total device hours display 4. Warning An error warning appears for about 5 seconds on the display. 5. Power characteristics Power: 60W, 100-240VAC, 47/63Hz ANSI/AAMI/EN 60601-1, UL/TUV External Power Supply:

No.	Name	Quantity	Technical specifications and standards
			Class I construction is standard (ground required) 100k hours MTBF
			Energy star efficiency level V compliant
			Over voltage / over current protection.
		5	6. Other parameters
			Unit dimensions (overall): 66 cm x 38 cm x 49.5 cm
			Unit dimensions (top light): 51.6 cm x 12.5 cm x 6.3 cm
			Unit dimensions (bottom light): 64.7 cm x 38 cm x 10 cm
			Bassinet dimensions: 62 cm x 32 cm x 10 cm
			Shipping (boxed) dimensions: 57 cm x 43 cm x 70 cm
			Shipping weight: 13 kg - 17 kg
			7. Standard
			ISO 13485
			CE certification allows the product to freely circulate within the EU market
			Registration certificate for circulation of medical equipment products in Vietnam by the Ministry of Health
			III. OTHER REQUIREMENTS
			Delivery and installation at the use place.
			Warranty period: 16 months from the acceptance date
			Commitment to providing spare parts for at least 07 years after
			the warranty period
		6	Attached with instruction manual.
2	Neonatal	45 set	Each set includes:
	resuscitation		- 01 Heat lamp
	devices		- 01 Nasal aspirator for newborn
			- 01 set of mask and balloon for newborn
			- 01 instrument box
			I. HEAT LAMP
			Year of production: from 2020, 100% new
		Á	Consists of:
			- 01 Light bulb
			- 01 Lampstand
			- 01 Lampshade - 01 Switch
			- 01 Power cord
			Technical specifications:

No.	Name	Quantity	Technical specifications and standards		
			1. Light bulb:		
			- Infrared bulb		
			- Power: 250 W		
			- Power supply: 220V/50Hz		
			2. Lampstand:		
			- Made of stainless steel coil flexible conduit, diameter 1.5cm		
			- Height: 30cm		
			- Base area: 180 cm <sup>2</sup>		
	*		- The lampstand has 3 rubber cushions that keep the lamp stationary and insulated, creating a distance between the lampstand and the table surface from 2 to 3mm		
			3. Lampshade:		
			- Made of powder coating aluminium		
			- Can be moved up and down changing the projection angle from -90 degrees to +90 degrees relative to the horizontal plane		
			4. Switch:		
			- Dimmer potentiometer with on/off switch and light intensity control		
			- The load capacity of the switch: 6A		
			5. Power cord:		
			- Flexible wire with two copper cores		
			- Load capacity 10A		
			- Cord length 180 cm		
			- Fasten with a 2-pin flat plug		
			- PVC sheath		
			II. NASAL ASPIRATOR FOR NEWBORN		
			Year of production: from 2020, 100% new		
			Standard device includes:		
			- 01 main machine		
			- 01 1 liter liquid container		
			- 01 bacterial-viral air filters and connection wire		
			- 01 set of suction catheter		
			- 04 PE plastic newborn suction tube (02 pieces in size 6 + 02 pieces in size 8)		

No.	Name	Quantity	Technical specifications and standards
			- 01 connecting pipe the container to the PE plastic suction
			tube
			- User manual in English and Vietnamese: 01
			Technical specifications:
			1. Main machine:
			- 01 meter displays suction pressure
			- Adjustable suction pressure: ≥ 0.075Mpa
			- Compressor capacity: ≥ 15L/min
			- Power source: AC 220V±22V, 50Hz±1Hz
			- Control: with on/off switch
			- Input power: 90VA
			- Noise level: ≤ 65dB(A)
			2. Size: 280 x 196 x 285 (mm)
		ri e	3. Container
			- Capacity: 1 liter
			- Material: plastic
			- Removable for cleaning
			4. Suction tube
			- PE plastic
			- 02 pieces in size 6 and 02 pieces in size 8
			5. Pipe connecting the container with the suction tube
			- Quantity: 01
			- Length: 200 cm
			- Attached bacterial-viral air filters
			- Material: flexible plastic
			III. SET OF MASK AND BALLOON FOR NEWBORN
			Year of production: from 2020, 100% new
			Quality certificates: ISO 13485 and EC
			1. Balloon for newborn
			- Made of PVC and elasticity
			- With one-way valve
			- Maximum balloon capacity: 250ml
			- Useful capacity: from 150ml
			- Air bag:
			+ PE plastic

No.	Name	Quantity	Technical specifications and standards		
			+ Airbag capacity: 1,700ml		
			+ One-way valve mounted to balloon		
			2. Mask		
			Consists of:		
			- 01 silicone mask no.0		
			- 01 silicone mask no.1		
	*		Characteristics:		
			- Silicone material		
			- Can be autoclaved with high-pressure autoclave.		
			- Synchronous coupling with balloon		
			- Easily removable for cleaning		
			3. Oxygen conductors		
			- PVC plastic		
			- Length 200cm		
			IV. INSTRUMENT BOX		
			Year of production: from 2020, 100% new		
			- Size: (33 x 19 x 7) cm		
			- With tight lid		
			- Material: Inox SUS 304		
			- Thickness of the box wall: 0.5mm		
			- Able to withstand ovens temperature of 170°C for 1 hour without changing shape or color.		
4			V. OTHER REQUIREMENTS		
			- Warranty period: 12 months (for the main machine) from the date of delivery of the device, no warranty for consumables:		
			bulbs, resistors, disposable accessories.		
			- Delivery location: at the use place.		

## **ANNEX 3: TENTATIVE DISTRIBUTION LIST**

No	Distribution list	Distribution address	Phototherapy (pcs)	Neonatal resuscitation devices (set)
I	HA GIANG			
1	Meo Vac District General Hospital	Group 5, Meo Vac town, Meo Vac district, Ha Giang province		1
2	Dong Van District General Hospital	Group 7, Dong Van town, Dong Van district, Ha Giang province		1
3	Quan Ba District General Hospital	Group 4, Tam Son town, Quan Ba district, Hà Giang.	1	1
4	Ha Giang Province general hospital	No. 11, Group 10, Minh Khai ward, Ha Giang city, Ha Giang province		2
5	Bac Me District General Hospital	Yen Phu Town, Bac Me district, Ha Giang province	1	1
6	Vi Xuyen District General Hospital	Group 10, Vi Xuyen town, Huyện Vi Xuyen district, Ha Giang province	1	1
7	Bac Quang Regional Hospital	Viet Quang town, Bac Quang district, Ha Giang province	1	1
8	Quang Binh District General Hospital	Group 5 - Yen Binh town - Quang Binh district - Ha Giang province		1
9	Hoang Su Phi Regional Hospital	Group 5, Vinh Quang town, Hoang Su Phi district, Ha Giang province	1	1
II	THANH HOA			-

No	Distribution list	Distribution address	Phototherapy (pcs)	Neonatal resuscitation devices (set)
10	Thanh Hoa Obstetrics and Gynecology Hospital	No. 183 Hai Thuong Lan Ong street, Thanh Hoa city, Thanh Hoa province	1	1
11	Thanh Hoa Pediatric Hospital	Quang Trung 3 street, Dong Ve ward, Thanh Hoa city, Thanh Hoa province	1	1
12	Ngoc Lac Regional Hospital	Le Duan, Ngoc Lac town, Ngoc Lac district, Thanh Hoa province		1
13	Thanh Hoa Province General Hospital	No. 181 Hai Thuong Lan Ong street, Dong Ve ward, Thanh Hoa city, Thanh Hoa province		1
14	Tho Xuan Regional Hospital	Tho Xuan town, Tho Xuan district, Thanh Hoa province	1	1
15	Nong Cong District General Hospital	Tap Cat hamlet, Nong Cong town, Nong Cong district, Thanh Hoa province		1
16	Ha Trung District General Hospital	5, Ha Trung town, Ha Trung district, Thanh Hoa province		1
17	Yen Dinh District General Hospital	Tan Ngu hamlet, Dinh Long commune, Yen Dinh district, Thanh Hoa province	1	1
18	Thieu Hoa Regional Hospital	Thieu Do commune, Thieu Hoa district, Thanh Hoa province		1
19	Hoang Hoa District General Hospital	But Son town, Hoang Hoa district, Thanh Hoa province		1
20	Hau Loc District General Hospital	No. 15 Luu Cong Hoa street, Group Tan My, Hau Loc town, Hau Loc district, Thanh Hoa province		1

No	Distribution list	Distribution address	Phototherapy (pcs)	Neonatal resuscitation devices (set)
21	Thach Thanh District General Hospital	Group I, Kim Tan, Thach Thanh district, Thanh Hoa province		1
22	Cam Thuy District General Hospital	Group 7, Cam Thuy town, Cam Thuy district, Thanh Hoa province	1	1
23	Lang Chanh District General Hospital	Group II, Lang Chang town, Lang Chanh district, Thanh Hoa province	1	1
24	Nhu Xuan District General Hospital	Group 4, Yen Cat town, Nhu Xuan district, Thanh Hoa province		1
25	Nhu Thanh District General Hospital	Group 3, Ben Sung town, Nhu Thanh district, Thanh Hoa province		1
26	Ba Thuoc District General Hospital	Gio hamlet, Ai Thuong commune, Ba Thuoc district, Thanh Hoa province		1
27	Quan Hoa District General Hospital	15 Highway, Group 4, Quan Hoa district, Thanh Hoa province		1
28	Quan Son District General Hospital	Group 6, Quan Son town, Quan Son district, Thanh Hoa province		1
III	DAK LAK			
29	Tay Nguyen Regional General Hospital	No. 184 Tran Quy Cap street, Tu An ward, Buon Ma Thuot city, Dak Lak province	2	2
30	Buon Ho District General Hospital	No. 12 No Trang Long, An Lac ward, Buon Ho district, Dak Lak province		1

No	Distribution list	Distribution address	Phototherapy (pcs)	Neonatal resuscitation devices (set)
31	Buon Ma Thuot General Hospital	No.62 Nguyen Dinh Chieu, Tan Loi ward, Buon Ma Thuot city, Dak Lak province	1	
32	Krong Ana District Health Center	No. 10 Nguyen Du, Buon Trap town, Krong Ana district, Dak Lak province		1
33	Buon Don District Health Center	Ha Bac hamlet, EaWer commune, Buon Don district, Dak Lak province	1	1
34	Ea Kar District Health Center	No 40 Tran Hung Dao. Ea Kar town, Ea Kar district, Dak Lak province		1
35	Krong Buk District Health Center	Pong Drang commune - Krong Buk district, Dak Lak province		1
IV	SOC TRANG			
36	Soc Trang Hospital for Women and Children	No. 194 Ton Duc Thang, Group 2, ward 8, Soc Trang city, Soc Trang province	1	2
37	Tran De District Health Center	Giong Giua hamlet- Tran De town, Tran De district, Soc Trang province	1.	1
38	Nga Nam District Health Center	Group 1, ward 1, Nga Nam, Soc Trang province	4	1
39	Thanh Tri District Health Center	Hamlet 2, Phu Loc town, Thanh Tri district, Soc Trang province	1	
40	My Tu District Health Center	My Thuan hamlet, Huynh Huu Nghia town, My Tu district, Soc Trang province		1

No	Distribution list	Distribution address	Phototherapy (pcs)	Neonatal resuscitation devices (set)
41	Chau Thanh District Health Center	Xay Cap hamlet, Chau Thanh town, Chau Thanh district, Soc Trang province	1	1
42	Ke Sach District Health Center	932 street, An Thanh hamlet, Ke Sach town, Ke Sach district, Soc Trang province		1
43	Long Phu District Health Center	Hamlet 2, Long Phu town, Long Phu district, Soc Trang province		1
44	Cu Lao Dung District Health Center	Street 30/4, Phuoc Hoa B hamlet, Cu Lao Dung town, Cu Lao Dung district, Soc Trang province	1	1
	TOTAL		20	45

Expected delivery: December, 2021

Contact details will provide after receipting of supplier's estimated delivery time.