Technical Specification of Battery-Operated Power Supply Source

S/No.	Specification	
1.	Weight of machine without Battery	18-20 Kg
2.	Dimension (Height x Length x Width) cm	Max. H-55 Max. L-40 Max. W-32
3.	Weight of machine with (2xBattery)	Max 30 kg
Essential Technical Specification		
1.	System Voltage	Minimum 72V
2.	Motor Type	Power state Brushless Motor
3.	Power Source	Minimum 72V Lithium-Ion battery
4.	Rated input Voltage	110 – 240 V
5.	Rated input watts while charging of Battery	500-700 Watt
6.	Rated output (receptacle)-Peak Power	Minimum 3600 Watt
7.	Rated output (receptacle)-Continuous Power	Minimum 1800 Watts
8.	Outlet Voltage	220V to 240V
9.	Rated output (receptacle) *Frequency	50Hz
10.	No. of Outlets	2 x 220-240 V
11.	Ground Fault Isolated	Yes
12.	On Tool Battery Charging Capability	Yes
13.	Rugged Metal Cage for protection of tool & stability	Yes
14.	Overload Protection Indicator	Yes
15.	Over Temperature Indicator	Yes
16.	Battery Charge level Indicator	Yes
17.	Recommended ambient operating temperature	(-)15°C to +50°C
18. Battery Technical Specification		
I.	Number of batteries supplied	01 No – Main and 01 No – Reserve
II.	Battery Voltage	Minimum 72 V
III.	Battery Rating	Minimum 6 Ah High output Battery
IV.	Battery type	Lithium-ion
V.	Battery operating Temperature range	(-)15°C to +50°C
VI.	Charging time of 01 Battery	Max. 90 Minute
VII.	Uniform charging and discharging	Yes
VIII.	Upper Voltage protection	Yes
IX.	Short Circuit protection relay	Yes
X.	Battery Level Indictor	Yes
XI.	Battery weight (Single Battery)	Max.4 to 6.0 kg
XII.	Transport Lock	Yes
XIII.	Suitable molded plastic case/light Metal case	Yes
19.	Cost free warranty	1 year
20.	Battery Certification	BIS if available or CE/UKCA/US 33488UL/ US38.33/IEC-62133-2 Certified

S/No.	Specification	
21.	Accessories	a. Operator's Manual b. Tool Kit c. Safety and Warning Labels
22.	Packing	Equipment to be provided with modular pack out rolling tool chest (fiber reinforced plastic)

Technical Specification of Mobile Lighting Tower

S/ No.	Specifications criteria	Generalised Specifications
A) Dimension		
1.	Height (Closed)	Max Height 1.2 Mtr
2.	Length x Width (Closed)	up to 550 x 550mm
3.	Height (extendable)	Min 4.0 Mtr.
4.	Maximum weight of lighting system (Without packing box, power source and accessories	upto 50 Kg.
5.	Maximum weight of packing box (Injection molded plastic or aluminum case with customized body) and accessories	upto 15 Kg.
6.	Wheel	Yes/02
7.	Adjustable tripod legs	Yes
8.	Light Angle	Focus of light should be able to provide light of all LED from 180 degree to 360 Degree
B) LED Luminaries Details		
1.	LED Luminaire	Min 360 watt
2.	Total luminous flux	Min 25,000 Lm
3.	Luminous efficiency (Lm/W)	Min 100 Lm/Watt
4.	LED IP protection	IP65
5.	CCT (Correlated color temp)	Between 4000K - 6000K
6.	Operating temp	-15 C to 50 C
7.	BIS Compliance	(IS 16102 (Part 1))
8.	Warranty	2Yr
9.	Light Dimmer	Yes, light brightness control by dimmer
C) Power Supply		
1.	Power Supply	AC, DC & Battery
2.	AC Supply voltage	140 V to 270 V
3.	DC Supply voltage	Upto 72 Volts
4.	Backup Hours (At full load)	Min 03 Hrs
D) Driver		
1.	Input supply voltage (AC)	140 V to 270 V
2.	Output voltage	Upto 72 Volt
3.	IP Protection	IP65
E) Battery		
1.	Battery for operating	01
2.	Spare Battery	01
3.	Battery type	Lithium Ion
4.	Battery Voltage	upto 72 V
5.	Battery capacity	Min 40 AH
6.	Battery operating temp	-15 C to 50 C
7.	Battery charging life cycle	Min 500 cycle
8.	Battery Management System (BMS) circuit to include	i) Uniform charging and discharging (IEC 62133) ii) Digital Overload Protection (IEC 62133) iii) Short Circuit protection (IEC 62133) iv)BIS Rating (IS 16046: Part 2: 2018/IEC 62133-2:2017) v)Battery backup power Level Indicator vi) Battery weight -upto 15 kg
F) Charger		
1.	Charger supplied	01 No
2.	Charging time	Max 4 Hrs for fully charge
3.	Supply Voltage Range	140 V to 270 V

S/ No.	Specifications criteria	Generalised Specifications
4.	Output Voltage Range	up to 72 V
5.	Charging Status Indicator	Yes
G) Other Specification		
1.	Wind resistance	45 Km/Hr
2.	Extension type	Manual with Pneumatic type
3.	Packing box type	Injection molded plastic or Aluminum case with customized body

Appendix- 'A'

Technical Specification of Drilling and Breaking Hammer Equipment

S/No.	Specification	
1)	Number of rechargeable battery required as power source	01
2)	Number of rechargeable battery to be supplied	02 No.(Main -01, Spare-01)
3)	Power from	18 Volt-36 Volt Platform 12 to 14Ah Lithium-ion High Output Single Battery
4)	Motor Type	Power state Brushless Motor
5)	Rate of percussion under load max. (Blows per minute)	0- 2500 or more.
6)	Chuck neck diameter	Minimum 62 mm
7)	Drilling capacity in concrete	Min 42 mm
8)	Tunnel bit in concrete, bricks and limestone	Min 60 mm
9)	Core cutter in concrete, bricks and limestone	Min 150 mm
10)	Auto stop E-clutch	Shuts down the tool to protect the user after 45° of sharp movement in bind up situations. a. Gyroscope Sensor, b. Electromagnetic Clutch, c. Robust Mechanical Clutch
11)	Anti Vibration Reduction Systems	Anti-vibration back handle supports Anti-vibration side handle
12)	Trigger lock feature	Prevents users from having to hold trigger during long periods.
13)	Service light indicator (at 53hours)	Yes
14)	Weight (w/o Battery) not more than	Max 11 kg
15)	Weight (kg) with Battery not more than	Max 12 kg
16)	Operation Modes	a) Rotary Hammering mode Hammering Mode.
17)	Soft Start	Yes
18)	LED Light	Yes; To lit up specify operation location
19)	Metal Gear Housing	Yes
20)	Recommended Ambient Operating Temperature	(-) 15 to (+)50 °C
21)	Flexible rechargeable battery system compatibility	Rechargeable battery for all equipment in 18 V or More - 8Ah/12Ah/14Ah.
22)	Cost free warranty	1 year
23)	Training at central place of the discretion of buyers	Yes
24)	Certification	BIS-CRS (IS 16046:2018) Certified
25)	Accessories	a. Operator's Manual b. Tool Kit c. Spare parts (drill bits, hammer bits, chisel bits- 02 sets each) d. Power Supply Cables (Min. 05 Feet) and Adapters e. Dust Collection System (Optional) f. Extension Cords (15 Mtr.) and Cord Protectors g. Safety and Warning Labels h. Charger compatible to recharge battery supplied with equipment-

S/No.	Specification	
		01
26)	Packing	Equipment to be provided with modular pack (fiber Reinforced plastic)