

FORMAT B.2

Format for Commercial Pre-Bid Queries

Tender No : TPSODL/OT/2022-23/138

Package Name: RC for 24V and 40A SMPS Float Charger and 40A SMPS Float Boost Charger with Integral DCDB at TPSODL

Note : The said format to be used only for Commercial Pre-Bid Query. Any Technical Query has to be strictly in Format B.1 Format for Technical Pre-Bid Query and sent seperately
Pre-Bid Query has to be sent in editable Excel file fomate only
Pre-Bid Query has to be sent through e-mail in TPSODL E-Tender System

Sr. No.	Detailed Reference to TPSODL Tender Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
1	2	3	4	5
1	7.2 Delivery Terms	Delivery period shall be 60 days from date of issue of release order or GTP approval whichever is later.	Please note that Delivery Location is not given , kindly confirm whether Delivery shall be one central place or more , accordingly will claim freight charges .	Delivery Location: All 5 nos of store 1. Berhampur 2. Bhanjanagar 3. Phulabani 4. Rayagada 5. Jeypore
2			2. Delivery shall be 90Days from the date approval of drawing and documents in CAT-1 and receipt of manufacturing clearance .	Shall be 60 days from the date of CAT-B approval of GTP & drawing.
3	7.3 7.3 Payment Terms:	On delivery of the materials in good condition and acceptance at TPSODL, BA shall submit the Bills/ Invoices in original in the name of TP Southern Odisha Distribution Limited to Invoice Desk. The payment shall be released within 45 days from the date of submission of certified bills/ invoices. The invoice must be in the name of TP Southern Odisha Distribution Ltd. with correct GST No.	100% payment along with 100% taxes and freight shall be paid within 45days from date of submission of bills . TPSODL will ensure certification of bill will be done within copules of day from bill submission .	As per Tender

FORMAT B.1**Format for Technical Pre-Bid Queries****Tender No** TPSODL/OT/2022-23/138**Package Name** Rate Contract for 24V and 40A SMPS Float Charger and 40A SMPS Float Boost Charger with Integral DCDB at TPSODL

Note : The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent separately
 Format to be used for query regarding Technical Pre-Qualification Requirement, Safety Pre-Qualification Requirement, Technical Set of Document
Pre-Bid Query has to be sent in editable Excel file format only
Pre-Bid Query has to be sent through e-mail in TPSODL E-Tender System

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
1	2	3	4	5
1	GTP 12(D):	Power factor at 50% and 100% load, 0.99 @ 50-100% load	Power factor at 50% and 100% load, 0.97 @ 50-100% load	Noted
2	GTP DCDB 25(a)	Feature of DCDB feeder ON/OFF status monitoring through controller display	Through Window facia annunciator	Noted
3	GTP DCDB 25(b)	Feature of DCDB earth fault monitoring through controller display	Through Window facia annunciator	Noted
4	GTP 26	Dropper Diode scheme	NA for FC & FCBC scheme having tap-cell diode and DC contactor in battery path for safety interlock.	Specification to be complied
5	GTP 29	Speed regulated Fan cooled	Fixed speed fans provided	Accepted
6	GTP 31	Lamp indication to be provided whether battery charger is running on Float mode or Boost Mode	On Microcontroller based LCD	Ok, but in LCD it should display the charger's running mode (i.e float/ boost mode)
7	GTP 33(f)	Load Current through controller display	Provide through separate DPM	Ok
8	GTP 33(i)	DC Earth Leakage	Provide through separate DPM	Ok
9	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 3)	Double wound impregnated naturally air cooled three phase mains transformer necessary secondary tapes for achieving required control DC output voltage	NA for SMPS modular based	Accepted
10	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 4)	Three phase, full wave, fully controlled rectifier bridge comprising of MOSFETs/IGBTs liberally rated, mounted on heat sinks and complete with resistor/condenser network for surge suppression, with rectifier MCBs & its trip alarm indication	NA for SMPS modular based	Accepted
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 5)	Filter circuit comprising of smoothing choke and condenser with MCBs for condenser & its trip alarm indication	Filter circuit is in-built in SMPS modules	Noted
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 7)	Dropper diode selector switch with minimum three positions along bypass scheme in case voltage reaches to one specified level.	NA for FC & FCBC scheme having tap-cell diode and DC contactor in battery path for safety interlock	Dropper diode required along with bypass contactor scheme.
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 9)	Potentiometers for setting DC output voltage in the Auto Mode and for adjusting the voltage in the Manual Mode	Adjustment provided through microcontroller based keypad	Accepted

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	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 17)	Auxiliary AC contactor to be interlocked with the DC contactor on the positive bus (Reputed make, high rating contactor with inbuilt aux contacts/ no add ON contacts)	DC contactor is operated only when the battery bus voltage instead of through AC contactor	Ok
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 19)	DC contactor with power `NC' contact interlocked with the AC Auxiliary Contactor of the float cum boost charger so that whenever the float cum Boost charger operated in its constant current Mode, the contact of DC Contactor on the positive bus bar opens out thus preventing the reflection of the excessive boost charging voltage across the DC load terminals. (Reputed make, high rating contactor with inbuilt aux contacts/ no add ON contacts)	DC contactor is operated only when the battery bus voltage instead of through AC contactor	ok
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 22)	Double pole ON/OFF DC MCB with lock and key for connecting the discharge resistor for periodical 10Hr discharge	Complied by a Double pole, 2 way selector switch, which will select charging or discharging	Specification to be complied
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 27)	Digital meters : - AC Moving iron Voltmeter of size 96 Sq.mm. with suitable selector switch & HRC fuses	Complied through microcontroller based LCD	Accepted
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 28)	Digital meters :- AC Moving iron ammeter of size 96 Sq.mm. with suitable current transformer & selector Switch	Complied through microcontroller based LCD	Accepted
	(4.) GENERAL CONSTRUCTION (List of major item: Sr. no. 36)	Lamp indication to be provided whether battery charger is running on Float mode or Boost Mode.	Complied through microcontroller based LCD	Accepted
	General Features (8.)	Electronic equipment shall be of modular design consisting of plug in modules in standard 19 inches metallic racks with metallic card guides. The cards should be provided with proper handles. Card to card wiring should be preferably through a motherboard.	In place of card guides and mother board the control cards will be mounted on separate mounting posts,	ok
	General Features (8.)	Mechanical interlocks to prevent wrong insertion of cards should be provided	Separate types of connectors having unequal length of wires will be used for different cards to prevent wrong connection	ok
	Wiring	The power wiring shall be carried out with 1.1KV grade PVC insulated copper cables conforming to IS:1554 (Part-I).	IS:694 is complied, IS1554 is applicable to field cables which are laid in the building.	ok
	Additional Features required	Selective over voltage shut down	Only a single adjustable setting available	Specification to be complied
	Additional Features required	Settable Time delay & hysteresis for each alarm	Fixed time delay and hysteresis	Ok

FORMAT B.1

Format for Technical Pre-Bid Queries

Tender No TPSODL/OT/2022-23/138

Package Name Rate Contract for 24V and 40A SMPS Float Charger and 40A SMPS Float Boost Charger with Integral DCDB at TPSODL

Note : The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent separately
 Format to be used for query regarding Technical Pre-Qualification Requirement, Safety Pre-Qualification Requirement, Technical Set of Document
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Aneexure 1 Battery Charger Deviations					Document Number: ENG-ELC-025		Dated: 24/02/2023			
Sr. No.	Clause No.	Clause Name	Sub Clause	Clause Name	Page	Clause Description	Float Charger	Float cum boost Charger	Bidder's Compliance	TPSODL Response
1	3	Climatic Condition	8	Wind velocity	3	300 Km/hr			NA for ID system	
2	4	GENERAL TECHNICAL REQUIREMENTS	7		4		40A or 60A	40A or 60A	Complied for 40A, however we can comply for 60A as well	40A required
3			16	Float Charger	4	Flot Voltage/cell	2.2V	2.2V	As per load voltage range	12v cell is used
4					5	Float Voltage/Battery bank	26.4	26.4	As per load voltage range	
5			17	Float Cum Boost Charger	5	Flot Voltage/cell	NA	2.3V	For Lead Acid battery, however same is	
6						Float Voltage/Battery bank	NA	27.6V	settable up to 36V	
7			19	Construction Details						
8				Thickness of CR sheet steel	5	3 mm for load bearing parts & 2mm for others			Cabinet is made with GI sheet duly powder coated. Sheet thickness 1.6mm sufficient to hold the internal light weight assembly. Cabinet design shall have sufficient strength to bear the weight of assembly.	Specification to be complied
9			23	Overall Maximum Dimensions: (W X D X H)	5	W X H X D: 1800 X 1900 X 800 mm	In common compartment		Complied FC, FCB charger along with integral DCDB in one cabinet within given dimension	Accepted
10			25	DC DISTRIBUTION BOARD	5	Incoming feeder comprising of copper bus bar double pole DC MCCB - 300 A			Complied with 200A/2P MCCB for DCDB incomer	Noted
11		5			220V/200A Copper bus bar (size to be mentioned by bidder)	Copper Bus bar with maximum	Complied as per charger rating	Ok		
12			26	Dropper Diode scheme	6	Yes			NA for FC & FCB scheme	Dropper diode required
13			27	Surge Protection Device (SPD) class	6	Type-1			Class C inside charger cabinet separately for FC & FCB charger	OK
14			29	Cooling	6	Speed regulated Fan cooled			Natural cool, however rectifier are force cooled	Fan Required
15	5	GENERAL CONSTRUCTION								
16			3		8	Double wound impregnated naturally air cooled three phase mains transformer necessary secondary tapes for achieving required control DC output voltage.	1	1	NA for SMPS charger	Ok
17			4		8	Three phase, full wave, fully controlled rectifier bridge comprising of MOSFETs/IGBTs liberally rated, mounted on heat sinks and complete with resistor/condenser network for surge suppression, with rectifier MCBs & its trip alarm indication	1	1	Single phase SMPS module to each FC & FCB charger	Specification to be complied
18			5		8	Filter circuit comprising of smoothing choke and condenser with MCBs for condenser & its trip alarm indication	1	1	Inbuilt featute of SMPS	ok
19			8		8	Auto/Manual selector switch for selecting the mode of operation of float charger	1	1	For FCB charger only, however FC charger will remain always in float condition	Ok
20			9		8	Potentiometers for setting DC output voltage in the Auto Mode and for adjusting the voltage in the Manual Mode	1	1	Inbuilt featute of SMPS	ok

21			20	6	Silicon blocking diode connected in series to the Nth cell of the Battery Bank to maintain continuity in the DC supply even during the second power failure during boost charging of the battery.	2 Nos	2 Nos	1 No TAP cell diode for one battery	NA as dropper diode required
22			22	9	Double pole ON/OFF DC MCB with lock and key for connecting the discharge resistor for periodical 10Hr discharge	1 No	1 No	1 No of rotary for discharge resistor	Specification to be complied
23			24	9	Earth fault sensing	1 No	1 No	1 No earth fault available in DCDB section	Ok
24			27	9	Digital meters :- AC Moving iron Voltmeter of size 96 Sq.mm. with suitable selector switch & HRC fuses	1 No	1 No	These parameters are available over controller display	Noted
25			28	9	Digital meters :- AC Moving iron ammeter of size 96 Sq.mm. with suitable current transformer & selector Switch	1 No	1 No		Noted
26			30	9	Space heater (80W) with Thermostat with MCB	1 No	1 No	Complied 1 no's in one cabinet	Ok
27			31	9	Cubicle Lamp of LED type with an ON/OFF switch and a fuse	1 No	1 No	Complied 1 no's in one cabinet	Ok
28		DC Distribution Board		11	300A double MCCB for DCDB incomer. Moving coil DC voltmeter for voltage & current display	NA	NA	Complied with 200A/2P MCCB. Digital VA meter for voltage & current display	Noted
29				11	220V/200A Copper bus bar (size to be mentioned by bidder)	Copper Bus bar with maximum		Complied as per charger rating	Ok
30		General Features		11	The Float charger, Float cum Boost charger with other Components and Integral DCDB shall be housed in a common cubicle with separate compartments for float & boost charger and for DCDB.			Complied, single cabinet divide into two section, one for FC & FCB charger while 2nd section is for DCDB	Ok
31			2	11	The Chargers shall be indoor, floor mounted, self-supporting sheet metal enclosed cubicle type. The Bidder shall supply all necessary base frames, anchor bolts and hardware. The Charger shall be fabricated using cold rolled sheet steel shall not less than 2.0 mm and shall have folded type of construction. The panel frame shall be fabricated using cold rolled sheet steel of thickness not less than 3.0 mm (for loadbearing members). Removable undrilled gland plates of at least 3.0 mm sheet steel and lugs for all cables shall be supplied by the Bidder. The lugs for cables shall be made of electrolytic copper with tin coat. The Charger shall have sufficient vermin proof. Ventilation louvers shall be backed with fine brass wire mesh			Cabinet is made with GI sheet duly powder coated. Sheet thickness 1.6mm is sufficient to hold the internal light weight assembly. Cabinet design shall have sufficient strength to bear the weight of assembly.	Specification to be complied
32		Service Level Agreement	3	16	Manufacturer Service person availability within 4 hrs from the issue reporting time. Issue shall be reported by TPSODL either via telephonically or email.				BA should provide online support for 24hr & physically person should be available within 24hr.