

No. IV-21011/18/2010-Prov-I
Government of India
Ministry of Home Affairs

26, Man Singh Road, Jaisalmer House,
New Delhi, 13.12.2010

To

The DGs: Assam Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D

Subject:- QRs/Technical Specifications of the (i) Solar Battery Charger for Radio Set, and (ii) Solar Battery Charger for Mobile Phones

The QRs/ Technical Specifications of the (i) Solar Battery Charger for Radio Set, and (ii) Solar Battery Charger for Mobile Phones as per Annexure - 'A' and 'B', have been approved by the Competent Authority in MHA.

2. Henceforth, all the CPMFs should procure the above items required by them strictly as per the laid down Technical Specifications/QRs.

(S.B.Nanda)
Under Secretary

Copy to:-

DD(Procurement),MHA

Copy for information to:-


PS to JS(PM),MHA

QRs/SPECIFICATION FOR SOLAR BATTERY CHARGER FOR RADIO SET

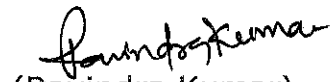
SI No.	PARAMETERS	Specification for	
		Foldable Type	Foldable & Flexible Type
1.	Solar Panel Cell Material	Mono- Polycrystalline	Amorphous silicon
2.	Solar battery Charging voltage should be field selectable	6V/12V	6V/12V
3.	Nominal peak power	60 W \pm 2W	60 W \pm 2W
4.	Peak power voltage while selected at 12 Volt	15 to 17 Volt	15 to 17 Volt
5.	Short Circuit Current while selected at 12 Volt	3.70 Amp	3.70 Amp
6.	Peak Power Current while selected at 12 Volt	3.4 To 3.5 Amp	3.4 To 3.5 Amp
7.	Peak open Circuit voltage while selected at 12 Volt	20 Volt \pm 2V	20 Volt \pm 2V
8.	Maximum Size while folded	405X 385 X 88 (mm)	280 x 245 x 61 (mm)
9.	Maximum dimension while unfolded	1625 X 385 x 22 (mm)	1500 mm X 1095 (mm)
10.	Solar Panel Weight	\leq 8.5 kg	\leq 2 Kg
11.	Operating Temperature	- 10°C to +55°C	- 10°C to +55°C
12.	Charging lead	Should be provided	Should be provided
13.	LED Indication	Charging and Discharging State	Charging and Discharging State
14.	There should be option of load controller for connecting load also online		
15.	General Tolerance other than Power and Vmp \pm 10%		
16.	Manpack/ compact, Portable, light in weight & convenient to carry portable type (with folding) solar battery charging system for mobile use , charging of Ni- Mh /lithium- ion battery(7.5 V 2000 to 2500 mAh), SMF/ Ni-Mh / Lithium-ion btys 12 V, 7-15 Ah. of HF Manpack Set Model- LHP-265, 2110M & VX-1210 (BEL, CODAN & Vertex make)		

Contd-2/-

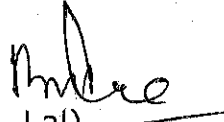
17	Proper plug / coupling arrangement must be provided for charging of batteries of Motorola, ICOM, Vertex, Kenwood make hand held radio sets and Sealed Maintenance Free/ NI-mH / Lithium ion btys 12 V 7-15 Ah. For HF Manpack Set Model- LHP-265 & VX-1210 (BEL& Vertex make) and bty of Laptop & Mobile phone (3.7 V 1000mAmp li-ion)
18	Inbuilt protection against low voltage, short circuiting, over charge & deep discharge of battery should be provided.


(M.S. Yadav)


AC (Comn), CRPF



(Ravindra Kumar)
SC (Eqpt), NSG



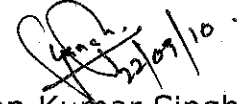
(B.B. Lal)
D.D(Tech), IB HQ



(Venu Kumar K.M)
D.D.(W/Shop), DCPW



(Dr. Indu Gupta)
Scientist "F" DRDO


22/09/10

(Pawan Kumar Singhal)
Director, DCPW

Approved/Not Approved



(Vikram Srivastava), IPS
Director General, CRPF