

**Extension-I**

**PRASAR BHARTI**  
**(India's Public Service Broadcaster)**  
**Directorate general of Doordarshan**  
**Doordarshan Bhawan, Copernicus Marg**  
**New Delhi -110001.**

**File No. 19(2)2020-21E1 (P) TV**

**12/11/2020**

M/s ---**Prospective Bidders**-----  
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**Subject: 1.** Draft Specification for V-Mount Batteries Required for ENG Camcorders.

**2.** Draft Specification for Chargers of V-Mount Batteries required for ENG Camcorders

The Draft specification(s) of the upcoming tenders is enclosed herewith to offer comments if any by prospective bidders by due date at e-mail ddpurchase401@yahoo.co.in or on following Address:

Assistant Engineer  
Room No. 403,  
Directorate General: Doordarshan,  
Doordarshan Bhawan, Copernicus Marg,  
New Delhi -110001 (India)  
Telephone: 011- **2311 4401**

**Specification For: 1.** Draft Specification for V-Mount Batteries Required for ENG Camcorders.

**2.** Draft Specification for Chargers of V-Mount Batteries required for ENG Camcorders

**Specification No.:** 1. STM01 2020 Dated: Nil &

2. STM02 2020 Dated: Nil

**Due Date to offer Comments:** 19.11.2020

Encl.: As above {(04+04) Pages}

Prabhat Kumar Singh  
Assistant Engineer  
For DG: DD

**Prasar Bharati**  
**India's Public Service Broadcaster**  
**Directorate General: Doordarshan**  
**Doordarshan Bhawan, Tower-A**  
**Copernicus Marg, New Delhi 110001**

**Specification for V-Mount Batteries Required for ENG Camcorders**

**Specification No.: STM01/ 2020**

**Dated:**  
**#ApprovedDate#**

**1. Scope:**

These specifications lay down the performance requirement of Batteries to be used with XDCAM HD 422 HD Digital Recording format Camcorders (Make Sony, Model PDW 700 & PDW 850) available in Doordarshan Network. These Batteries will be used for both indoor as well as outdoor content acquisitions.

**2. General:**

2.1 The offered Batteries should be from a reputed manufacturer and the quoted model should be field proven and in use by leading broadcasters especially Public Service Broadcasters. The bidder should essentially submit the list of the Broadcasters to whom the quoted Model has been supplied. The tender without the proper user list are liable to be rejected.

2.2 All major components of the Battery should comply with highest quality standards.

2.3 Offered Battery should be ergonomically designed having contemporary safety features to provide complete electrical and mechanical safety.

2.4 A suggestive Bill of Material is attached as Annexure-1.

**3. Essential Features:**

**3.1 The batteries offered should be directly compatible with currently available Camcorders in Doordarshan Network i.e. with Sony Make Camcorders Model: PDW 700 & PDW 850.**

**3.2 The Batteries offered should be chargeable with Chargers currently available in Doordarshan Network i.e. with Make: Sony Model: BC-L160, Make: Anton Bauer Model: Performance Dual V Mount Charger (Part No.: 8475-0122), Make: PAG Model: Cube 9708& PL 16, Make: Core SWX Model: GP 2LSJetc.**

3.3 The Battery should be based upon Lithium-Ion Cell chemistry.

3.4 Battery's V Mount mechanism must be durable for secure fit with high quality 5 pin connector, diminishing power delivery losses to Camcorder.

3.5 The offered Battery should be designed for longer life span both in terms of Run Time and Time per Charge.

3.6 Battery must be equipped with adequate protection mechanism to eliminate any damage due to abnormal behavior in terms of Charge, Voltage,

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Current and Temperature.

3.7 The Battery container should be leak proof and made of high strength material to withstand strains and stresses of the harshest broadcast environment hazards such as vibrations, shocks etc. It should also be unaffected with the solvent of the Battery electrolyte.

3.8 The offered Battery should have at least one Power Tap connector and One USB Connector to power camera accessories.

3.9 The On Board Display / Indicator of battery should give accurate Capacity and Remaining Runtime status. In addition Battery information should also be available to the operator in the Viewfinder thorough compatible data system of the XDCAM HD422 Camcorder.

3.10 Offered Battery should be able to run XDCAM HD422 Camcorders for approximately 120 minutes when Recording (Viewfinder, Manual Lens and Microphone attached), LCD Monitor ON, VDR SAVE / STBY switch set to SAVE (Power consumption approximately 41W).

3.11 Offered Battery should also be able to run Camera Mounted Lights, RF Microphone Receiver or RF Camera Mount A/V transmitter etc. beside the Camcorder.

3.12 The Li-Ion Batteries should be highly safe, reliable and compliant with various International Transport Regulations in force like ICAO (International Civil Aviation Organization), IATA (International Air Transport Association), Manual for Test and Criteria of the UN recommendations on the transport of dangerous goods and FAA (Federal Aviation Administration) safety guidelines so that Batteries can be legally transported and it must be tested as per International standards. Necessary certification in this regard may also be enclosed.

3.13 **Date of manufacturing of the delivered Batteries should not be older than five months from the date of delivery.**

#### **4. Technical Specification for Batteries:**

<b>S.No.</b>	<b>Parameters</b>	<b>Range</b>
1.	Cell Chemistry	Lithium - Ion
2.	Battery Mount	V- Mount
3.	Nominal Output DC Voltage	14.5 V $\pm$ 0.5 V
4.	Nominal Capacity	95.Wh $\pm$ 5 Wh
5.	Maximum Output Current	$\geq$ 10 A
6.	Weight	$\leq$ 800 gms
7.	Operating Temperature	-10° C to 45° C

#### **5. Compliance:**

5.1 Any substandard compliment offered in the offer may cause the rejection of complete offer with the sole responsibility of the bidder.

5.2 A point-by-point compliance statement from the principal manufacturer as well as the bidder in respect of all the points laid down in these specifications is to

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be enclosed along with the offer in the format given below. Mere signature on the copy of the specifications shall not be accepted as a compliance statement.

The figures so mentioned should be supported by record of these in the Technical Literature enclosed with the tender and reference to the page number of enclosed literature for all features and technical specifications should be mentioned in the relevant column. Offers without the compliance statement or with incomplete compliance statement will liable to be rejected with the sole responsibility of the bidder. Any deviation from the specification detailed in the compliance statement is to be highlighted separately.

S. No. of DD Specs.	DD Specs	Compliance (Yes/No)	Performance Fig. of Offered Product	Reference to the Page Number of Enclosed Literature	Deviations, in case of Non-Compliance	Optional items, if any, Req'd. to make the System Compliant to DD Specs	Features in the Offered Product which Exceeds DD Specs
1	2	3	4	5	6	7	8

**6. Accessories:**

All the accessories such as Power Cables etc. required to complete the system should be offered by the bidder. **The bidder should certify the completeness of the system in all respect.**

**7. Documentation:**

One set of printed / soft copy of technical and operation and maintenance manuals for all the equipment is to be provided on non-returnable basis along with the tender to facilitate the technical evaluation, otherwise tender is liable to be ignored. The successful bidder will have to supply printed / soft copy of operation, service and maintenance manual with respect to each equipment as per quantity specified in BOM.

**8. Guarantee:**

8.1 With reference to the clause no. 8.2 of the 'General Terms and Conditions (GTC)' under Annexure-II of Tender Document. The complete system including all items / equipment should be guaranteed for **Three years** of trouble free operation from the date of commissioning. In case of any item or equipment failure including software and hardware within this period, the same shall be rectified or replaced free of cost to Doordarshan at the site. In case it is not rectified within one week, replacement of the equipment shall be arranged by the bidder.

8.2 The Guarantee includes all Hardware, Software and Modules of complete system.

8.3 The Bidder shall provide up gradation of all the offered software, if any, free of charge during the warranty period.

**9. Advance Sample & Its Testing:**

**The bidders are required to submit sealed advance samples of the**

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**offered Batteries for technical evaluation on returnable basis along with the tender. Offers without the advance samples are likely to be rejected. If required, the firm has to arrange for the technical facilities & the other logistics required for the testing of the advance sample on a short notice.**

**10. Inspection:**

The equipment shall be subjected to inspection by a team of DD Officials authorized by Doordarshan Directorate at New Delhi.

**11. Delivery of Stores:**

The delivery period is 3 Months from the date of placement of Purchase Order.

**12. Enclosures:**

The bidder must necessarily submit the following enclosures along with the technical bid:

12.1 Compliance statement with respect to all the points of the specifications duly signed by the OEM as well as by the bidder.

The reference to the page number of enclosed literature for all the features and technical specification should be essentially mentioned in the relevant column of the compliance statement.

12.2 Technical Manuals / Detailed Technical Literature / Catalogs for all the offered products for substantiating the Model No. and Technical Specification.

**12.3 Model specific User List of the offered product.**

12.4 Any other document mentioned elsewhere in the Tender document.

**The tender is liable to be rejected in the absence of the above enclosures with the sole responsibility of the bidder.**

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**Annexure-1**

<b>S. No.</b>	<b>Details of Item</b>
<b>1.</b>	<b>V Mount Batteries</b> for ENG Camcorders (PDW 700 & PDW 850)
<b>2.</b>	<b>User Guide, Operation and Service Manual</b> for above mentioned Batteries

**Prasar Bharati**  
**India's Public Service Broadcaster**  
**Directorate General: Doordarshan**  
**Doordarshan Bhawan, Tower-A**  
**Copernicus Marg, New Delhi 110001**

**Specification for Chargers of V-Mount Batteries required for ENG Camcorders**

**Specification No.: STM02/ 2020**

**Dated:**  
**#ApprovedDate#**

**1. Scope:**

These specifications lay down the performance requirement of Chargers to be used for charging Batteries required for XDCAM HD 422 HD Digital Recording format Camcorders (Make Sony, Model PDW 700 & PDW 850) available in Doordarshan Network. These Chargers may be used for both indoor as well as outdoor charging of Batteries.

**2. General:**

2.1 The offered Chargers should be from a reputed manufacturer and the quoted model should be field proven and in use by leading broadcasters especially Public Service Broadcasters. The bidder should essentially submit the list of the Broadcasters to whom the quoted Model has been supplied. The tender without the proper user list are liable to be rejected.

2.2 All major components of the Charger should comply with highest quality standards.

2.3 Offered Charger should be ergonomically designed having contemporary safety features to provide complete electrical and mechanical safety.

2.4 A suggestive Bill of Material is attached as Annexure-1.

**3. Essential Features:**

**3.1 The Charger offered should be able to charge Batteries currently available in Doordarshan Network i.e. Batteries of Make: Sony Model: BP GL95 & 65, Make: Anton Bauer Model: Digital V 90 (Part No.: 8675 0095), Make: PAG Model: L96e, Make: Core SWX Model: Hypercore 98S etc.**

3.2 The charger should be designed to be able to charge Lithium-Ion chemistry battery and it should maximize the reliability, performance safety and service life of the battery cells.

3.3 Charger should be able to charge at least two V Mount Batteries simultaneously.

3.4 The charger should take less than 3 Hours to charge two fully discharged 90 to 100Wh batteries to charge 100 % simultaneously.

3.5 It should have multi-function read out to display critical battery and charger data.

3.6 The charger should be lightweight and rugged in design to withstand the broadcast environment hazards such as vibration, shocks etc.

3.7 It should have proper locking mechanism to hold the batteries effectively.

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3.8 It should have protection against short circuit, excess battery voltage and reverse battery voltage.

3.9 It should comply with various Electrical safety regulations / standards in force.

#### 4. Technical Specification for Chargers:

S.No.	Parameters	Range
1.	Charging Terminals	Two
2.	Mount	V Mount
3.	Input Supply Voltage	100-240 VAC, 50-60 Hz
4.	Charging Current	≥ 3 A on both Charging terminals simultaneously
5.	Power Supply Output for Camcorder	Min. 90W (Nominal) On 4 Pin XLR connector
6.	Weight	<3200 gms
7.	Operating Temperature	0° C to 45° C

#### 5. Compliance:

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5.2 A point-by-point compliance statement from the principal manufacturer as well as the bidder in respect of all the points laid down in these specifications is to be enclosed along with the offer in the format given below. Mere signature on the copy of the specifications shall not be accepted as a compliance statement.

The figures so mentioned should be supported by record of these in the Technical Literature enclosed with the tender and reference to the page number of enclosed literature for all features and technical specifications should be mentioned in the relevant column. Offers without the compliance statement or with incomplete compliance statement will liable to be rejected with the sole responsibility of the bidder. Any deviation from the specification detailed inn the compliance statement is to be highlighted separately.

S. No. of DD Specs.	DD Specs	Compliance (Yes/No)	Performance Fig. of Offered Product	Reference to the Page Number of Enclosed Literature	Deviations, in case of Non-Compliance	Optional items, if any, Req'd. to make the System Compliant to DD Specs	Features in the Offered Product which Exceeds DD Specs
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#### 6. Accessories:

All the accessories such as Power Cables etc. required to complete the system should be offered by the bidder. **The bidder should certify the completeness of the system in all respect.**

#### 7. Documentation:

One set of printed / soft copy of technical and operation and maintenance manuals for all the equipment is to be provided on non-returnable basis along with the tender

to facilitate the technical evaluation, otherwise tender is liable to be ignored. The successful bidder will have to supply one set of printed / soft copy of operation, service and maintenance manual with respect to each equipment as per quantity specified in BOM.

## **8. Guarantee:**

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8.2 The Guarantee includes all Hardware, Software and Modules of complete system.

8.3 The Bidder shall provide up gradation of all the offered software, if any, free of charge during the warranty period.

## **9. Advance Sample & Its Testing:**

**The bidders are required to submit sealed advance samples of the offered Chargers for technical evaluation on returnable basis along with the tender. Offers without the advance samples are likely to be rejected. If required, the firm has to arrange for the technical facilities & the logistics required for the testing of the advance sample on a short notice.**

## **10. Inspection:**

The equipment shall be subjected to inspection by a team of DD Officials authorized by Doordarshan Directorate at New Delhi.

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### **12.3 Model specific User List of the offered product.**

12.4 Any other document mentioned elsewhere in the Tender document.

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**Annexure-1**

<b>S. No.</b>	<b>Details of Item</b>
<b>1.</b>	<b>Dual Chargers</b> for V Mount Batteries (for ENG Camcorders (PDW 700 & PDW 850))
<b>2.</b>	<b>User Guide, Operation and Service Manual</b> for above mentioned Chargers