

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

No.: 2 (2) (8) / STM / TS / Optical Disc / 2017-18 / E-II

Specifications No.: STM 07/2018(M)

Dated: 16.07.2019

# Specifications for Rewritable Professional Optical Disc Media

# 1. Scope:

These specifications lay down the performance requirement of Rewritable Professional Optical Disc Media to be used in XDCAM HD422 HDTV Digital Recording Format Studio Recorders and Camcorders for Audio & Video Recordings, Playback and Editing purposes. The disc will be used in broadcast TV Studio environment for programme production and transmission purposes.

# 2. Features Required:

- 2.1 The professional optical disc should be rewritable and compatible with the XDCAM HD422 camcorders & decks.
- 2.2 The professional disc should be offered in the capacities of 23.3 GB single layer and 50 GB dual layer. Discs should be preformatted to enable immediate use.
- 2.3 It should achieve a track pitch of 0.32 µm with 405 nm wavelength blue-violet laser optical head for high density recording.
- 2.4 It should have long recording times, 40 minutes or more on 23.3 GB disc and 90 minutes or more on 50 GB disc with MPEG HD 422 @50 Mbps XDCAM format.
- 2.5 It should provide quick random direct access to the recorded material. It should also be suitable for a linear editing system.
- 2.6 It should be highly reliable and durable for high performance under tough environmental conditions and extreme temperature. It should have excellent data integrity and an archival storage life of over 50 years.
- 2.7 The disc should have hard coat to make it scratch-resistance and an extremely low electrostatic charge to make it difficult for static electricity to be generated and preventing dust inside the camera from damaging the disc.
- 2.8 The disc should be enclosed in an antistatic plastic cartridge shell with a shutter mechanism to protect the disc against dust and other airborne contaminants, mechanical vibration, surface scratches and X-rays. It should also protect the disc from damage if it is dropped.
- 2.9 The cartridge should be rugged enough to cope with the knocks and shocks of real-life shooting conditions.
- 2.10 The rewritable professional optical disc should have ultra-low error rates even after 1,000 overwrites and should provide consistently excellent picture and sound quality with proxy and metadata.

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d Disc Media: STM 07/2018(M), Dated 16:07.2019

3. Technical Specifications:

S. No.	Description	Parameters		
3.1	Disc Type	Rewritable		
3.2	Storage Capacity	23.3 GB & 50 GB		
3.3	Recording Format	Phase Change Recording		
3.4	Recording Laser wavelength (blue violet)	405 nm		
3.5	Track pitch	0.32 μm		
3.6	Data Transfer rate (Write)	86 Mbps		
3.7	Substrate	Polycarbonate		
3.8	Disc Diameter	120 mm		
3.9	Disc Thickness	1.2 mm		
3.10	Cover Layer Thickness	0.1 mm		
3.11	Cartridge Width	128.6 mm		
3.12	Cartridge Height	130.6 mm		
3.13	Cartridge Depth	9.1 mm		
3.14	Erase / Write Cycles	≥ 1000 times		
3.15	Read Cycles	≥ 1000000 times		
3.16	Raw Byte Error Rate	≤ 0.0002		
3.17	Estimated Shelf Life	≥ 50 years		
3.18	Estimated Archival Life	≥ 50 years		
3.19	Operating Conditions	-5 to 55° C , 10 to 90% RH		
3.20	Storage Conditions	-10 to 55° C, 5 to 90% RH		

### 4. Compliance:

- 4.1 Any substandard product included in the offer may cause the rejection of complete offer with the sole responsibility of bidder.
- 4.2 The firm should provide the offered un-priced bill of material in electronic form also in addition to the hard copy for ease of technical evaluation.
- 4.3 A point-by-point compliance statement from the principal manufacturer 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 are liable to be rejected with the sole responsibility of the bidder. Any deviation from the specifications detailed in the compliance statement is to be highlighted separately.

S. No of D 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	if any, Reqd. 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
1	2	3	4	5		6	6 7

Specifications for Reventable Professional Optical Disc Media: STM 07/2018(M), Dated 16.07.2019

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Page 2 of 3

22/07/9

5

#### 5. Accessories:

All the essential accessories required to complete the system should be offered by the bidder. The bidder should certify the completeness of the system in all respect. All the optional items should be quoted separately. The bidder must provide enough details about such optional items to decide its utility.

#### 6. Documentation:

One set of technical /user manual for the offered product is to be provided along with the tender to facilitate the technical evaluation, otherwise the tender is liable to be ignored.

### 7. Guarantee:

The media should be guaranteed for **two years** of trouble free operation from the date of supply. In case of any failure within this period, the same shall be replaced free of cost to Doordarshan.

### 8. Advance Sample & Its Testing:

The firms are required to submit advance samples of the offered media for technical evaluation on non-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 notice of 3 days.

#### 9. Inspection:

The product shall be subjected to inspection by authorized Doordarshan officials at New Delhi.

#### 10. Enclosures:

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

- 10.1 Compliance statement with respect to all the points of the specifications duly signed by the OEM.
- 10.2 The reference to the page number of enclosed literature for all features and technical specifications should be essentially mentioned in the relevant column of the compliance statement.
- 10.3 Technical manuals/Detailed technical literature/catalogues for all the offered products for substantiating the model no. and technical specifications.
- 10.4 Model specific User list of the offered product.
- 10.5 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 bidder.

Mrs 19

Page 3 of 3

# PRASAR BHARATI

(India's Public Service Broadcaster)

# **O/o Deputy Director General (E)** Doordarshan Central Purchase & Store



**2**: 011-26492758, 26492782,9013940203,9958356353

⊠:sge.cps@gmail.com

File No. 32(2)2019-20E1(P)TV/GeM

Dated:- 03.01.2020

Subject:-Procurement of professional optical Discs media 23.3 GB and 50 GB. Ref:-DG: DD Indent No.:-ST/22/19, no. (02)/1279 dated 22.07.2019.

This office has created reverse auction bid on Government-e-Market place( GeM) portal for procurement of professional optical Discs media as per following details:-

S.No.	Description	Qty	GeM RA No.	RA End Date	RA Published Date
01.	23.3 GB capacity Professional optical Discs Media	12250 Nos.	GEM/2019/RA /29283 dated 26.12.2019	16.01.2020 Time13:00:00	26.12.2019
02.	50 GB capacity Professional optical Discs Media	15550 Nos.	GEM/2019/RA /29263 dated 26.12.2019	16.01.2020 Time13:00:00	26.12.2019

It is requested to upload this notice on PB Website.

Yours faithfully

(V.K.Khullar) Assistant Engineer

For Dy. Director General (E)

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01. Additional Director General (IT), DDK Delhi for uploading this notice on DD India website.

02. Deputy Director General (T), PBS for uploading this notice on PB Website

For Dy. Director General (E)