

Technical CST format for Integrated Receiver Decoder (IRD)

Sr. No.	Parameter	Specifications	Compliance (Yes/No)	Remarks
1	Input Interfaces			
1.1	RF Interface			
1.1.1	Connector	F type/ BNC		
1.1.2	Frequency	L Band (950 to 2150 MHz) or more		
1.1.3	Level	-25 to -65dBm or better range		
1.1.4	LNB Power	13V, 18V selectable		
1.2	DVB-S			
1.2.1	Constellation	QPSK		
1.2.2	Symbol Rate	1Msp/s to 45Msp/s or better		
1.3	DVB-S2			
1.3.1	Constellation	QPSK, 8PSK, 16APSK, 32APSK		
1.3.2	Symbol Rate	Up to 35Msp/s or better		
1.4	DVB-S2X			
1.4.1	Constellation	QPSK, 8PSK, 16APSK, 32APSK		
1.4.2	Symbol Rate	Up to 35Msp/s or better		
1.5	ASI Input			
1.5.1	Connector	BNC, 50 ohm (If 75 ohm, suitable adaptor should be provided)		
1.5.2	Input Rate	100 Mbps or better		
1.5.3	Standard	EN50083-9		
1.6	IP Input			
1.6.1	Connector	RJ-45 100/1000BaseT		
1.6.2	Input Rate	100 Mbps or better		
2.	Video Outputs	Composite/Component Video, 3G/HD/SD-SDI with embedded audio, ASI out, IP transport stream output		
3.	Audio Outputs	Balanced Stereo audio output		
4.	Video Decoding			
4.1	Decoding formats	MPEG-2 SD 4:2:0, 4:2:2; MPEG-2 HD 4:2:0, 4:2:2; MPEG-4 AVC SD 4:2:0, 4:2:2; MPEG-4 AVC HD 4:2:0, 4:2:2; HEVC SD 4:2:0, 4:2:2; HEVC HD 4:2:0, 4:2:2;		
5.	Audio Decoding			
5.1	Decoding formats	MPEG-1 Layer-II, AAC,		
6.	Video Processing	Full HD and HD Video down conversion to SD, Aspect ratio conversion		
7.	Content Security	DVB Common Interface single and multi-service decryption, BISS mode 1 and E single and multiservice decryption		
8.	Monitoring and Control	Front Panel Keypad with LCD, HTTP (Web GUI), SNMP traps and alarms,		

9.	Power	230VAC, 50/60Hz		
10.	Warranty	1 Year or more		
11.	Mounting	19-inch rack mountable (mounting brackets to be provided by vendor)		
12.	Operating temperature	0° to 45°C or better		
13.	Accessories to be supplied as per the technical specification	1x HDMI to SDI converter 1x SDI to HDMI converter		
13.1	HDMI interface	Full HD support		
13.2	SDI interface	6G/3G/HD-SDI		
14.	Documents	Soft copies of operating, service, programming manual to be provided along with the instrument. Vendor to provide technical datasheets of the offered product only. Vendor shall ensure that the datasheet of the offered item includes all the tendered technical specifications. Vendors shall avoid providing the generic or standard datasheets/manuals.		
15.	Technical bid shall include un-priced bill of material indicating all optional modules & part numbers required for meeting the tender specifications	To be provided		
16	Indication of make/model/optional items quoted for, in the compliance sheet and datasheet of the quoted model	To be provided		
17.	Service support	Required in India. Turn-around time shall be provided by the vendor. In event of equipment taken out of MCF premises, for service /repair, necessary MCF purchase procedures to be followed like bank guarantee etc.		
18.	Demonstration of the instrument by the supplier at MCF- Hassan/Bhopal before price bid opening	To be arranged within two weeks of intimation, if required by MCF.		
19.	Offered product must not contain malicious content	Bidder to provide OEM Certification mentioning that the resident firmware/software in the instrument offered will not have any kind of Malicious software.		
20.	Product evaluation criteria	Quoted model shall not reach End of Life for minimum 5 years. Supporting document/ Undertaking from the OEM to be provided. All the hardware and firmware support required to derive the above specification		

		should be preinstalled on the equipment & the equipment should work on standalone basis.		
21.	Vendor evaluation criteria	Vendor has to be in the Satellite broadcasting equipment field for minimum 5 years, (supporting documents shall be provided for the same, Old PO reference may be provided older than 5 years). Vendor shall be OEM or OEM certified authorized distributor/seller (Authorization certificate shall be with reference to this tender enquiry)		
22.	Delivery	It Should be <=12 Weeks from the date of firm PO		
23.	<p>Vendor eligibility criteria: The technical bids will be evaluated based on the following parameters. For this procurement, bids/tenders from Class-I, Class-II and Non-Local Suppliers/Bidders are admissible. Offer will be evaluated & processed in conformation with GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and subsequent amendments.</p> <p>a. Compliance to the terms & Preference in purchase, will be provided as per Make In India Guidelines order no: P-45021/2/2017-PP(BE-II) dated 04.06.2020 of Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce and industry and Make In India Guidelines Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure, Ministry of Finance Under Public procurement division for the General Financial rule (GFRs)</p> <p>b. As per above order definition of local content means amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, in percentage.</p> <p>c. Bidder to mention in the certificate/compliance statement, the type of local supplier (Class-I, Class-II local or Non-Local Supplier) for the offered quote.</p> <p>d. Bidder to give final compliance in strictly Yes or No form for the Bidder eligibility criteria: Class-I, Class-II local or non-local supplier.</p> <p>e. If the technical offer is submitted under Class-I or Class-II Local Supplier category following compliance to be provided.</p> <p>f. Bidder to provide self-certified document for Class-I or Class-II local supplier with self – certification.</p> <p>g. Bidder shall clearly mention in the certificate, break up of local content in percentage without disclosing the actual price and the details of location(s) at which the local value addition is made.</p> <p>h. If bidder is not the OEM, bidder to obtain declaration from the named OEM that their product calls for such value addition locally for the stated end use of the equipment/component.</p> <p>i. If bidder is non-local supplier, then the bidder shall provide Manufacturer Authorization Certificate (MAF) from the OEM</p>			
24.	'Class– I local supplier' / 'Class- II local supplier' shall offer only standard and catalogued product for Equipment / Spares Cards / assemblies. If the above offered Equipment / Cards / Assemblies are under development / to be developed the bid will not be considered.			