

Annexure - A

Specification for "Vehicle Rear View Camera System"

Specification No. VFJ/ODC/SP/RVC/MPV/02, Dated:- 09.12.2019

"Vehicle Rear View Camera System" consisting of LCD Monitor, Camera with night vision capability, connecting cables and accessories for installation and along with installation guide, operating and maintenance manual.

Monitor Specification:

Screen Size : Minimum 6" Digital TFT LCD with LED Backlight
Display Pixels: 800x480
monitor : Not more than
200 mm (W) x 30mm (D) x 120 mm (H)
Color : Soft touch Black
TV System : PAL/NTSC
Operating Voltage: 24 VOLT DC
Input : Minimum 2 video inputs & integrated speaker

Environmental Specification:

Shock Rating : Minimum 100 g
Vibrating Rating : Minimum 4g
Connector IP Rating : IP 40 or equivalent
Monitor IP Rating : IP 30 or equivalent
Operating Temperature: -15° to +50° C

Camera Specification:

Operating Voltage : 24 VOLT DC
Visual Resolution : 420 TV lines
System : PAL
Infrared LED Lights : Minimum 18 Nos.
Sensor : 01 No Day/Night sensor
Illumination Distance : Minimum 15 Meters
Microphone : Integrated
Viewing Angle : Minimum 90° (H) , 70° (v)
Overall dimension : Not more than
Maximum 90 (W)x70mm (D)x 80 mm (H)



Dir/ODC

HOS/ODC

JWM/ODC

Environmental Specification:

Shock Rating : Minimum 100 g
Vibrating Rating : Minimum 10 g
Connector IP Rating : IP 67 or equivalent
Camera IP Rating : IP 67 or equivalent
Operating Temperature: -15° to +50° C

Others:

Cable Length : Minimum 10 mtrs.

Terms & Conditions

1) Supplier will supply the item as per drawings no. 2689-57-31, 2713-57-31 & 2714-57-31 (All three drawings enclosed)

2) Supplier will provide environmental specification test certificate from NABL / OEM's test certificate/International/government approved lab.

3) Supplier will provide certificate for electro magnetic compatibility (EMC) from NABL / OEM's test certificate /International/government approved lab.


4) Warrantee Certificate for 02 Years from the date of the supply on all items supplied.

5) Supplier will provide conformance of performance certificate as per specification from NABL / OEM's test certificate/International/government approved lab.

6) Sample should be approved before bulk supply.

7) Supplier will assist in commissioning of the "Vehicle Rear View Camera System" on the vehicle during fitment trial at VFJ. Failing in fitment trial, complete lot will be rejected.


Dir/ODC


HOS/ODC


JWM/ODC

QAI for Rear View Camera Specification No: VFJ/ODC/SP/RVC/MPV/02 Dtd 09.12.2019

AIM: -To check the Quality & performance of Rear View Camera for upgraded MPV 4x4 vehicle as per Specification No VFJ/ODC/SP/RVC/MPV/02 Dtd 09.12.2019

Inspection to be carried out in following stages & samples to be selected randomly against each lot.

1. Visual Inspection
2. Dimensional Check
3. Material Testing
4. Fitment & performance Test
5. Marking & packing

S.No	PARAMETER	INSPECTION INSTRUCTION	QTY. TO BE CHECKED
1	Visual inspection	The rear view camera to be checked visually for the following aspects 1.completeness 2.All the assy. to be free from crack or any other defects	For Pilot sample 100 % For Bulk 100 %
2	Dimensional check	Dimensions & other Test parameter/Data mentioned in the drg of Rear View Camera should be strictly checked as per Drg & specification of Rear View Camera Drg no.2689-57-31, 2714-57-31 ,2713-57-31 & Specification no VFJ/ODC/SP/RVC/MPV/02 Dtd 09.12.2019	Pilot sample 100% For bulk special inspection Level S-I as per IS:2500
3	Material Testing	Supplier will provide Following test certificate 1. Environmental specification test certificate from NABL/OEM's Test certificate/international /government approval lab 2.Electro Magnetic compatibility (EMC) from NABL/OEM's test certificate /international/government approved lab. 3.Conformance of performance certificate as per specification from NABL/OEM's test certificate /international/government approved lab.	For Pilot sample 100 % For bulk supply -100%
4	Fitment & Performance test	The supplied sample of Rear View camera to be fitted in upgraded MPV 4x4 vehicle .There should be no difficulty in the fitment .Supplier will assist in fitment & installation of supplied samples of Rear View Camera System on the vehicle during Performance trial at VFJ.Failing in performance trial ,complete lot will be treated as rejected.	For Pilot sample 100 % For Bulk special inspection level S-1 as per IS:2500
5	Marking & Packing/Preservation	Store should be suitably packed to avoid any transit /storage damage and store to be suitably stamped for firm monogram	100 % for Sample & bulk supply


WM/ CPP