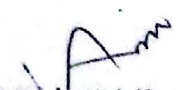


DC TO DC CONVERTER (POWER SUPPLY) 72 TO 13.8 VDC FOR LOCOMOTIVE VHF SET

1	Input Voltage	72 VDC $\pm$ 10%
2	Output Voltage	13.8 VDC $\pm$ 1%
3	Maximum load capacity	20 ampere
4	Ripple Voltage	Not more than $\pm$ 1% RMS
5	Ambient Temperature	-30C to +60C
6	Duty cycle	100%
7	Input and output Heavy Duty /20A Connectors as per requirement	02 Ncs.
8	Provision of protections	1. Under/over voltage 2. Reverse voltage 3. Short circuit (output)
9	Shock & Vibration	Should meet with military standard for vibration and ruggedness.
10	Service & repair Manual	One with ten Power Supplies.

- Bidder will provide a sample for technical evaluation with technical bid for switch based repairable power supply. Size of the power supply must be smart as per locomotive requirement.
- Authorization certificate of the offered item from the Original Equipment Manufacturer (OEM)/Manufacturer (Local/foreign) shall be required from the participating firm.
- Bidder is required to mention / provide brand name, manufacture name, year of manufacturer, country of origin, technical literature, import documents (if applicable) and manufacturer 1 year warranty certificate of each item.

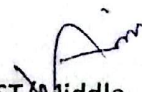

XEST Middle


ROT Internal

SPECIFICATION OF REGULATED AC TO DC POWER SUPPLY (IMPORTED)

1	Capability	To charge the battery & simultaneously supply the current to VHF equipment
2	Input voltage	220 volt AC $\pm$ 10%
3	Output voltage	DC 1 volt to DC 15 volt variable
4	Output current	30 ampere
5	Regulated DC output voltages	Better that $\pm$ 2%
6	Overload protection	as per requirement
7	Over voltage protection	15 volts
8	Short circuit protection	Available as per requirement
9	Ripple voltage	Better than 3m V
10	Ampere meter	Digital
11	Volt meter	Digital
12	Cooling system	Temperature sensitive cooling fan
13	Circuit system	Linear series
14	Operating manual	01 with each
15	Repair & services manual	01 for every 20 Nos. Power supplies
16	Converter type	transformer

- Bidder will provide a sample for technical evaluation with technical bid for transformer based repairable power supply.
- Authorization certificate of the offered item from the Original Equipment Manufacturer (OEM)/Manufacturer (Local/foreign) shall be required from the participating firm.
- Bidder is required to mention / provide brand name, manufacture name, year of manufacturer, country of origin, technical literature, import documents (if applicable) and manufacturer warranty certificate of each item.

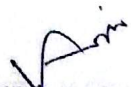

XEST/Middle


FOT Internal

SPECIFICATION OF BROAD BAND VHF BASE ANTENNA (IMPORTED)

Frequency Range	146 MHz to 174MHz
Gain	Not less than 6.5 dB
Maximum Power	200 Watt
Input impedance	50 Ω
Polarization	Vertical
Connector	UHF/ SO239 / equivalent
Rated Wind Velocity	50 MTR per second
Mass diameter accepted	30-60mm diameter
Accessories	Standard accessories as per requirement complete in all respect
Antenna type	Omnidirectional

- Bidder will provide a sample for technical evaluation with technical bid.
- Authorization certificate of the offered item from the Original Equipment Manufacturer (OEM)/Manufacturer (Local/foreign) shall be required from the participating firm.
- Bidder is required to mention / provide brand name, manufacture name, year of manufacturer, country of origin, technical literature, import documents (if applicable) and manufacturer warranty certificate of each item.


XEST/Middle


FOT International

SPECIFICATION OF ANTENNA FOR ICOM WALKI TALKI F3 GS

- Type Flexible $\frac{1}{4}$ Wave whip antenna
- Output power Minimum 5 w
- Band width : 2 MHZ
- Frequency: VHF 136-174 MHz
- Gain: 2.1 db
- Impedance: 50 ohm
- Color: Black
- Length 4-7 inch
- Connector type ICOM J type (RF-J) Screw connector / equivalent

Compatible with following Radios:

- Fit for ICOM IC-F3 F11 F14 F15 F16 F33 F34 F70
- Fit for IC-F3000 F3001 F3002 F3003 F3010 F3011
- Fit for IC-F3020 F3021 F3020 F3023 F3026
- Fit for IC-F3101 F3018 F3161 F3162 F3029
- Bidder will provide a sample for technical evaluation with technical bid. Original sample will be verified from the manufacture
- Authorization certificate of the offered item from the Original Equipment Manufacturer (OEM)/Manufacturer (Local/foreign) shall be required from the participating firm.
- Bidder is required to mention / provide brand name, manufacture name, year of manufacturer, country of origin, technical literature, import documents (if applicable) and manufacturer warranty certificate of each item.
- Tender will be finalized on item wise basis.

XEST/Middle

FOT Internal