

PEDESTAL CONTROL UNIT (PCU)

1. Nomenclature/ Part No/ GIG Number:

- (a) Nomenclature- Pedestal Control Unit (PCU)
- (b) Part No- 1110D/MPR 1025M900-001
- (c) GIG- 1387011

2. Year of Procurement/ Source:

- (a) Year of Procurement- 2014-15
- (b) Source- M/s ELTA, Israel

3. Fleet/ Sub System/Wpnn System: Medium Power Radar (MPR)/ Antenna

4. **Technical Applicability/ Broad Purpose:** It is responsible for controlled movement of antenna unit. It provides real time positioning data to RCU.

5. **Technical Specifications** (attach as separate sheets): Attached as annexure-5

6. **Publication Details** (attach as separate sheets): MPR System (P/N- 1023F000-0001) & Maintenance Course (13302) (can't be attached as confidential document)

7. Photograph of Equipment:



8. **Brief Description:** Pedestal Control Unit (PCU) is a part of MPR. It is responsible for controlled movement of antenna unit. It provides real time positioning data to RCU.

9. **Classification of Equipment-** LRU/Testers/ Ground Equipment/ Role Equipment (Electrical, Electronics, Mechanical, Software based etc.): LRU
10. **Previous Repair History:** Presently dependent on foreign OEM M/s ELTA, Israel
11. **Criticality (Priority I, II or III):** Priority I
12. **Requirement:**Indigenisation
13. **Quantity Required (One time/ Annual):**3 per year
14. **Sample Availability:** Available
15. **Scale/ Deficiency:** Scale
16. If deficient - How deficiency is being plugged? N/A
17. **SPOC details item/ fleet wise:** SPE (ISC) 13 BRD, AF
18. **Draft QTS with major testing requirement (If already designed):** Yet to be prepared
19. **Any Other Relevant Information:** Nil

Annexure- III

(to RFP No 13BRD/1706/1/438/Indg
dated 19/05/19)

TECHNICAL SPECIFICATION

1. GIG No of Original Item : **1387011**
2. Item Nomenclature : **PCU**
3. Major Assembly : **MPR**
4. Sub Assembly : **CU Rack**
5. **Physical Specifications:-**
 - (a) Product Dimensions (attach an illustration or sketch or Drawing as necessary):
Card available at Radar Lab, 13 BRD AD for reference
 - (b) Length of cable : **NA**
 - (c) End connectors : **As per sample**
6. **Material Specification:-**
(As per original material needs)
 - (a) Type of material
 - (b) Specific characteristics of the material
 - (c) Material Specifications, such as strength, resistance, density, etc } **As per sample & applicable MIL standards**
7. **Functional Specification:-**
 - (a) Operating Voltage, with range : **P-P 230V AC 3 phase
P-N 380V AC 3 phase**
 - (b) Operating Current, with range : **8 A**
 - (c) Operating Frequency, with range : **50/60Hz**
 - (d) Type of input & output connector(s)
(use standard nomenclature & type specifications): **As per the sample**

- (h) Function of the item with respect to input, output and item function:
- It provides accurate readings of azimuth and elevation position and its transmission to RCU.
 - It provides communication with RCU for command and status messages transmission
 - It support several protections to prevent uncontrolled behavior of the pedestal/Antenna.

8. **Environment Specification:-**

- (a) Operating Temperature and altitude limits : -10°C to +55°C
- (b) Humidity : 95% at 40°C

9. **Test Schedule for FT and Product Acceptance :**

- (a) Functional Testing : At 13 BRD, AF (MPR Lab) for preliminary & dimensional checks.
- (b) Field Trial and Endurance test: At any MPR field unit.


10. **Application Standards/ Product Specifications: As per sample and applicable MIL standards**

11. **Documentation:-**

- (a) Circuit Diagram
- (b) Technical Description & illustrations
- (c) Layout Diagram
- (d) User Manual
- (e) Maintenance Manual
- (f) Parts Catalogue, etc

To be provided by the vendor at the time of supply of item

12. **Testing program and procedure:-** To be developed and provided by firm for testing.


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