

ANNEXURE TO TENDER NO. DPS/MRPU/1/2/1627

1. Description of the item and Quantity:

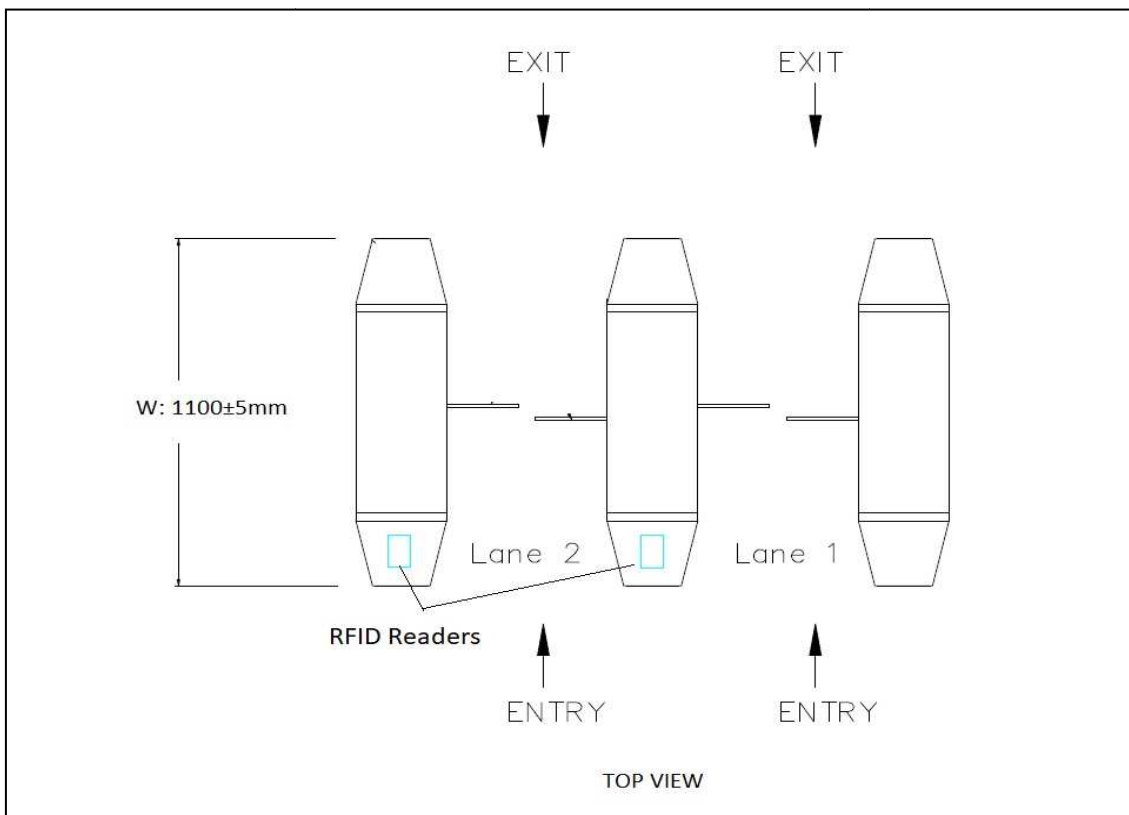
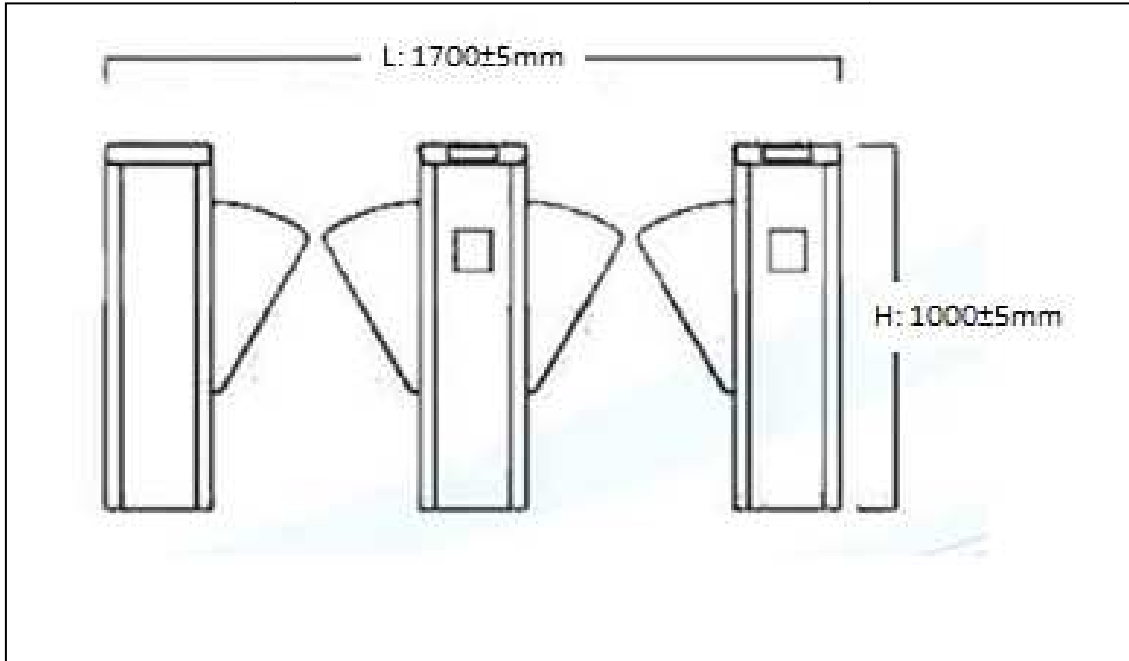
Item No.	Item	Quantity
1	Supply, installation and commissioning of 2 Lane 3 Box Retractable Flap Barrier.	1 Set
2	Single Lane Controller	1 No
3	5A Power supply with Battery Back up PCB	1 No
4	DC Motor with gear and Drive for single lane FB	1 No
5	IR Proximity Sensors for Single Lane FB	2 Nos
6	Magnetic Slot Sensor for single lane FB	2 Nos
7	Springs for single Lane	2 Nos
8	Lever Key for single lane	1 No
9	Lane Indicator	2 Nos
10	Toughened Glass	2 Nos

2. Detailed specifications of the items:

Item No 1: 2 Lane 3 Box Retractable Flap Barrier		
SINo	Parameter	Description
1	Motor drive	DC Brushless Motor
2	Cabinet material	SS304
3	Flap	Clear Toughened glass, 10±2mm thick
4	Barrier Movement	Retracting
5	Passage Width	460±5mm
6	Housing Dimensions (WxLxH)	1100x1700x1000mm±5mm
7	Safety IR sensor	Required. To ensure safe passage of user. Timing shall be user selectable
8	Tailgate sensor	Required
9	Wrong way intrusion sensor	Alarm with buzzer on user taking wrong way intrusion
10	Lane Indicator	Green & Red on both side
11	Flap opening time	Less than One second
12	Flap hold-open time	Selectable up to 30 seconds
13	Operation modes	Entry/Exit on event trigger. Option to make Free Entry / Free Exit.
14	Default operation mode	Normally closed. Entry/Exit on event trigger i/p.
15	Emergency mode	Always Open on Emergency trigger
16	Power supply	230VAC, 50Hz ±5%
17	Temperature	20 to 55 degree Celsius
18	RFID Reader	Provision to flush mount RFID reader within the system
19	Certifications	CE
20	Warranty	Minimum one year from the date of commissioning and acceptance of the system at site.
II Training at Site		
II.a	Training	Detailed training on the usage and maintenance of the system after installation and commissioning at site.
II.b	Place	IGCAR, Kalpakkam
II.c	No of persons to be trained	Minimum five

Item No 2 to 10: These items are Spare components for the Retractable Flap Barrier in Item No 1. They shall be fully compatible with the Retractable Flap Barrier.

3. Architecture Drawings of the system:



4. Scope of Work

This tender is for the fabrication, supply, installation, testing and commissioning of Retractable Flap Barrier at designated areas which shall be provided by the purchaser after placing the purchase order. The scope of the work includes.

- Fabrication of Retractable Flap Barrier (RFB) as per the dimension mentioned in the detailed technical specifications and architecture drawing.
- Inspection and testing of the RFB as per the technical specifications at the factory.
- Delivery of RFB and its associated components at IGCAR, Kalpakkam.
- Installation of RFB at site as per procedures. RFB has to be firm mounted on concrete floor with proper routing of power, control and networking cables through PVC conduits/casing (Approx length 10 meters). Power cable (3core 1.5sqmm) and Cat-6 (STP) cable and any other accessories required for installation of the system at site is in the scope of supplier.
- Installation of RFID card reader within the RFB (Supply of RFID card reader is in the scope of IGCAR).
- Interfacing the RFB with existing plant access control system for operation.
- Testing, commissioning and handing over the integrated system.
- Warranty for one year from the date of commissioning and acceptance of the system.

5. General description of the system

- The operation of the system shall be noise free.
- Both the pathways shall operate independently for Entry/Exit.
- The Retractable Flap Barrier shall be Normally Closed.
- Entry/Exit shall be on successful event triggers from already installed Access control systems (IGCAR scope). There shall be option to make Free Entry / Free Exit.
- There shall be an option to keep the Flap Barrier in Always Open Mode on requirement using Key Operated switch.
- There shall be safety sensor to ensure that once the user enters the passage, the flap doesn't close before the user cross it. The timing shall be user selectable.
- The system shall have anti-tailgating functionality.

6. Location

The project site is located at about 70 KM south of Chennai [Tamil Nadu]. The environmental conditions are salty, corrosive, Relative humidity: 60 to 95%. Supplier has to make his own arrangement for travel, accommodation during installation and commissioning period.

7. Qualification criteria for the Bidders:

The bidder has to meet the following criteria without which the bid will not be considered for technical evaluation and will be rejected.

1. The Bidders participating in the tender shall be OEM or Authorized dealer for the item offered. Document proof for the same (Certificates) has to be submitted along with the tender.
2. The Bidders participating in the tender shall have supplied similar items (both technically and cost) to IGCAR or other Government of India institutions within the scope of last 5 years. Document proof for the same (copy of PO / Customer acceptance certificate) has to be submitted along with the tender.

For the purpose of this clause, the meaning of "similar items", the decision of the tendering authority is final.

8. PDI (Pre Dispatch Inspection) Acceptance Criteria:

Inspection will be carried out by Purchaser or his representative at supplier's Premises. Supplier shall provide necessary testing facilities as required.

Visual inspection, Power on test, Functional test shall be carried out for the Retractable Flap Barrier.

Visual inspection:

- All the items shall be brand new.
- No cracks / holes / corrosion / sharp edges.
- Compliance of the dimensions/build materials as in detailed technical specifications.
- Proper fixing of PCBs/motor/other accessories inside the Flap Barrier with safe routing of power and control cables.
- Availability of all the Operation & Maintenance manuals and Certification documents.

Power on tests:

- System shall do self power ON test and shall indicate any fault / healthiness.
- The system shall come in READY state with required visual indications.
- There shall be no overheating or vibrations of any system components.

Functional tests:

- The system in set operation mode (Default operation mode: Flaps normally closed).
- The flaps open on required input event trigger and stays for set hold-on time.
- Proper indications of passage ready for Entry/Exit.
- Verification of safety sensors for safe passage of user.
- The system shall immediately be on Ready state once the user passage event is over.
- Verification of Anti-tailgate functionality.
- Verification of Alarm on wrong way intrusion.
- Verification of system performance on repeated fast transactions.
- There shall be no overheating or vibrations of any system components during operation mode.

All the spares compatibility and functionality with the system shall be demonstrated.

All relevant test certificates regarding the indent items shall be provided by the supplier along with the call for PDI.

9. Site Acceptance Criteria

Visual inspection, Power on test, Functional test shall be carried out for the Retractable Flap Barrier at site.

Visual inspection:

- Safe receipt of all the items as per the tender.
- No development of cracks / holes / corrosion / sharp edges.
- Compliance of the dimensions/build materials as in detailed technical specifications.
- Firm mounting of the system on floor.
- Proper installation of the RFID reader (supply of reader: IGCAR scope) inside the Flap Barrier.
- Proper fixing of PCBs/motor/other accessories inside the Flap Barrier with safe routing of power and control cables.
- Proper laying and termination of AC power and Network cables.
- Receipt of all the Operation & Maintenance manuals and Certification documents.

Power on tests:

- System shall do self power ON test and shall indicate any fault / healthiness.
- The system shall come in READY state with required visual indications.

- There shall be no overheating or vibrations of any system components.

Functional tests:

- The system in set operation mode (Default operation mode: Flaps normally closed).
- The flaps open on required input event trigger (From RFID reader control system) and stays for set hold-on time.
- Proper indications of passage ready for Entry/Exit.
- Verification of safety sensors for safe passage of user.
- The system shall immediately be on Ready state once the user passage event is over.
- Verification of Anti-tailgate functionality.
- Verification of Alarm on wrong way intrusion.
- Verification of system performance on repeated fast transactions.
- There shall be no overheating or vibrations of any system components during operation mode.
- All the spares compatibility and functionality with the system to be demonstrated.

10.Terms and conditions :

1. All the items to be supplied should be brand new and meet the standards / certifications as mentioned in the detailed technical specifications.
2. Item Nos 2 to 10 in the tender are spare components for the Retractable Flap Barrier in Item No 1. Hence splitting up of Purchase Order will not be allowed.
3. Bids not offering complete list of spare components, as mentioned in the tender, shall not be considered for evaluation.
4. The Bidders participating in the tender shall have supplied similar items (both technically and cost) to any of the DAE units during the last five years. Document proof for the same (copy of PO / Customer acceptance certificate) has to be submitted along with the tender. Otherwise their offer shall be rejected.
5. Bidders must mention make & model no. of the equipment offered by them, with detailed specification (on separate sheet). Otherwise their tender will not be accepted.
6. The bidder shall confirm whether each of the item technical specifications complied and shall indicate the same in a tabular form against each point and enclose separately along with their bid.
7. All the test reports, operating & maintenance manual and compliance certificates of the item shall be available at the time of Pre-dispatch inspection.
8. Delivery place: IGCAR Stores, Kalpakkam.
9. Price: For delivery at destination.
- 10.Payment: As per MRPU terms and conditions.
- 11.Guarantee / Warrantee shall be provided for a minimum of 12 months from the date of supply and acceptance at site.
- 12.Post Supply Inspection of the items shall not be permitted. Any offer containing the condition of post supply inspection will be rightly rejected. It is therefore, mandatory for the bidders, while quoting, to indicate in clear terms the requirement of post supply inspection by any outside agency.
- 13.Packaging and transportation of the indent items will be supplier's responsibility. Supplier shall be responsible for any damage to the items during the transportation to site.