



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CENTRAL LIBRARY
(ISO-9001 CERTIFIED LIBRARY)
IIT PO, CHENNAI - 600 036 -INDIA
Website: <http://www.cenlib.iitm.ac.in>



Ref: CLIB/2019-20/ENQ/3

Date: 2nd Dec., 2019

DUE DATE: 16.12.2019

Sub: Inviting two bid tender - Technical and Commercial bids for the Entrance Management System with the following items –Reg.

Dear Sirs,

1. Quotations are invited in duplicate for the items detailed overleaf.
2. The Quotations duly sealed and **superscribed on the envelope** with the **reference No.** and due date, should be addressed to the undersigned so as to reach before the due date
3. Both Technical Bid & Commercial Bid should be put in separate covers clearly specifying on the cover as “Technical Bid” and “Commercial Bid” as the case may be.
4. Both the independent covers should be placed in one big cover and sealed with the superscription on the left-hand side “**TENDER FOR THE SUPPLY of ENTRANCE MANAGEMENT SYSTEM** ” DUE ON **08.11.2019**. The Tender should be sent to The Librarian, Central Library, Indian Institute of Technology Madras, Chennai - 600036 **only through SPEED POST.** (No hand delivery will be accepted).
5. The Quotations should be valid for sixty days from the due date and the delivery period required should be clearly indicated.
6. The price bid offer must be inclusive after the buyback value
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier’s expenses.
8. Local Firms: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
9. Firms outside Madras: Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
10. The rates of GST and other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST will be admitted at any stage and on any ground whatsoever.
11. Goods should be supplied carriage paid and insured.
12. Goods shall not be supplied without an official supply order.

13. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later
14. The Buyback offer submitted by the vendor should include old 2 tripods and 2 Dummy housing.
15. The Civil and Electrical work will be carried out by IIT Madras if required.
16. The quotation will be considered only with buyback offer the rates of buyback items should be mentioned specifically in the price bid.
17. The firms should clearly indicate the warranty terms and condition.

Yours faithfully

- Sd -
Librarian

ENTRANCE MANAGEMENT SYSTEM at CENTRAL LIBRARY, IIT MADRAS - CHENNAI

The Central Library, IIT Madras is proposing to provide a Tripods based Entrance Management System using the Existing RFID made Biometric readers and Smart Card for Users at IIT Madras Library.

Technical Specification for Hardware & Software Requirements.

Requirement for Tripods based Entrance Management System:

S. No.	Description	Quantity
1	Tripods- Long Version for Indoor Use	2
2	Dummy Housing for Fixing Biometric Reader	2

1. SPECIFICATIONS-TRIPODS

Half Height Tripod Turnstile gate	
Application	Indoor
IP Rating	IP32
Housing	Long version. Stainless steel SS304; IP44 protection. LED gate end displays with Red "X" and Green Arrow; stainless steel face panel for mounting of peripheral components such as card readers, etc.
Construction	one standard width dual pedestal housing with 515mm arm length, 3 x 120 degree pivot arms, high performance high torque MHTM drive system designed for an excess of 10 million maintenance-free cycles of operation, 100% duty cycle, 0.5s open/close time, up to 40 persons per minute, multifunction master lane controller and mounting plates for card readers, etc.
Housing Material Of Construction	SS-304 for high protection against corrosion
Housing Dimension (W X D X H)	1300 x 260 x 1035 mm approximately
Passage Width	515 mm
Drive Technology	100% duty cycle high-performance high torque drive system providing bi-directional control of pedestrian passage in excess of 10 million maintenance-free cycles of operation or a minimum of 10 years in a pedestrian gate application; integrated resolver for precise positioning feedback; high output torque for fast acceleration and deceleration; shaft rotates freely without power; no gearbox resulting in no backlash or wear and tear.

Controller	Motor Controller using the latest DSP technology allowing for very accurate control of torque, speed, acceleration and deceleration parameters of the motor in any position resulting in highly dynamic operation; extremely fast reactions in abnormal situations such as impact detection or forced entry/exit attempts; 3 phase servo drive power end-stage; closed-loop operation for precise positioning; ramping up and ramping down configuration; fully adjustable speed; resolver input for position feedback; LED indicators for operation and error diagnostics
Compliance & Safety	<ul style="list-style-type: none"> • Compliance to CE. Adherence to Safety Requirements of the • EMC Directive 2004/108/EC, • Low Voltage Directive 2006/95/EC and • The basic requirements of the Machinery Directive 2006/42/EC <p>A 3rd party certificate for compliance to the above directives must be submitted by the bidder</p>
Power Supply	230+/- 10% VAC, 50 Hz.
Maximum Power Consumption	Not More than 70 watts
Operating Temperature	30 Degree Celsius to + 50 Degree Celsius
Duty Cycle	100%
Integration	Shall function in integration with Smart cards, proximity reader-based access control systems etc.
Performance Requirement	<p>MCBF- 10 Mil Cycles MTBF- 50,000 Hours MTTR- 30 Minutes</p>
Additional features required	<p>Automatic return drop arm for optimal or emergency egress conditions – no manual intervention required; drop arms will automatically return to home position upon restoration of power</p> <p>Super smooth arm movements with minimal force and no kickback for utmost safety – will not spring forward at the end of travel (i.e. hit a child in the back of the head)</p> <p>Bi-directional control – selectable</p> <p>Forced entry/exit and impact detection</p> <p>Card readers/keypad mounting plates standard</p> <p>High speed, noise-free and maintenance-free operation</p> <p>Pulse storage – for multiple card swipes, etc.</p> <p>Easy to program controller for common lane configurations</p> <p>Adjustable hold open time</p>
Certificates Required	<p>TUV certificate For Opening & Closing time ISO Certificate of the Company Certification for Ingress Protection EMC Test report from a BSI approved agency</p>

Organization	The OEM should have a manufacturing plant in India operational for the last 10 years where they have manufactured & installed 200 lanes of quoted products in India. Documentary evidence to be provided.
Spare availability	All required spares should be available in India
Technical Support	Technical Service support from OEM should be available in Tamil Nadu.
ISO Certification	The OEM should have ISO9001 certification & ISO14001 certification

2. SPECIFICATION DUMMY HOUSING:

1. Should be made of Stainless Steel with at least 4 floor-bound clamps
2. Should match the Tripod Barrier in aesthetics and dimensions.
3. Housing Dimension (W X D X H) 1300 x 260 x 1035 mm approximately

3. BUYBACK for EXISTING HARDWARE :

- Two TRIPODS
- Two Dummy Housing for Fixed with Biometric Reader

TERMS AND CONDITIONS:

Existing System Overview & Requirement

- The Current Tripods System is more than 12 years old
- The current system has to be upgraded with the new one
- The Tripod based Entrance Management System is used for IN and OUT.
- The Proposed Tripods should be integrated with the existing Biometric and Smart Card Readers software.

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The vendor should submit the Technical bid tender document in the following format

Half Height Tripod Turnstile gate		Compliance Yes/No
Application	Indoor	
IP Rating	IP32	
Housing	Long version. Stainless steel SS304; IP44 protection. LED gate end displays with Red "X" and Green Arrow; stainless steel face panel for mounting of peripheral components such as card readers, etc.	
Construction	one standard width dual pedestal housing with 515mm arm length, 3 x 120 degree pivot arms, high performance high torque MHTM drive system designed for an excess of 10 million maintenance-free cycles of operation, 100% duty cycle, 0.5s open/close time, up to 40 persons per minute, multifunction master lane controller and mounting plates for card readers, etc.	
Housing Material Of Construction	SS-304 for high protection against corrosion	
Housing Dimension (W X D X H)	1300 x 260 x 1035 mm approximately	
Passage Width	515 mm	
Drive Technology	100% duty cycle high-performance high torque drive system providing bi-directional control of pedestrian passage in excess of 10 million maintenance-free cycles of operation or a minimum of 10 years in a pedestrian gate application; integrated resolver for precise positioning feedback; high output torque for fast acceleration and deceleration; shaft rotates freely without power; no gearbox resulting in no backlash or wear and tear.	
Controller	Motor Controller using the latest DSP technology allowing for very accurate control of torque, speed, acceleration and deceleration parameters of the motor in any position resulting in highly dynamic operation; extremely fast reactions in abnormal situations such as impact detection or forced entry/exit attempts; 3 phase servo drive power end-stage; closed-loop operation for precise positioning; ramping up and ramping down configuration; fully adjustable speed; resolver input for position feedback; LED indicators for operation and error diagnostics	
Compliance & Safety	<ul style="list-style-type: none"> • Compliance to CE. Adherence to Safety Requirements of the • EMC Directive 2004/108/EC, • Low Voltage Directive 2006/95/EC and • The basic requirements of the Machinery Directive 2006/42/EC A 3 rd party certificate for compliance to the above directives must be submitted by the bidder	
Power Supply	230+/- 10% VAC, 50 Hz.	

Maximum Power Consumption	Not More than 70 watts	
Operating Temperature	30 Degree Celsius to + 50 Degree Celsius	
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Additional features required	Automatic return drop arm for optimal or emergency egress conditions – no manual intervention required; drop arms will automatically return to home position upon restoration of power	
	Super smooth arm movements with minimal force and no kickback for utmost safety – will not spring forward at the end of travel (i.e. hit a child in the back of the head)	
	Bi-directional control – selectable	
	Forced entry/exit and impact detection	
	Card readers/keypad mounting plates standard	
	High speed, noise-free and maintenance-free operation	
	Pulse storage – for multiple card swipes, etc.	
	Easy to program controller for common lane configurations	
	Adjustable hold open time	
Certificates Required	ISO Certificate of the Company Certification for Ingress Protection EMC Test report from a BSI approved agency	
Organization	The OEM should have a manufacturing plant in India operational for the last 10 years where they have manufactured & installed 200 lanes of quoted products in India. Documentary evidence to be provided.	
Spare availability	All required spares should be available in India	
Technical Support	Technical Service support from OEM should be available in Tamil Nadu. Undertaking for availability of qualified/trained technical personnel for support during warranty period.	
ISO Certification	The OEM should have ISO9001 certification & ISO14001 certification	
Hardware Warranty	Minimum 2 years	
Buyback of existing system	Acceptance	
Detailed technical brochure	Enclosure	
Authorized dealer/distributorship of OEM	Certificate enclosed	

COMMERCIAL BID

The Commercial bid tender document shall be submitted in the following format

1. Quotation for Tripods based Entrance Management System:

SI No.	Nam of the Items	Unit Price	Discount	Tax	Buyback value (inclusive Tax)	Total Amount	HSN/GST code

2. Annual Maintenance Contract after 2 year Warranty period for TRIPOD Hardware

Sl. No.	One Year	Two year	Three years	Tax	Total
Amount					

Note: The IIT Madras reserve rights to cancel the tender