

Indian Institute of Technology Palakkad

भारतीयप्रौद्योगिकीसंस्थानपालक्काड

STORES & PURCHASE SECTION

Email: purchase@iitpkd.ac.in Telephone: 04923-226586/87 GSTIN: 32AAAAI9910J1ZR

Tender No: TENDER/2023-24/287 Date of Publication: 01-12-2023 Date/Time of Closing: 22-12-2023, 15:00 hours

Indian Institute of Technology Palakkad Invites Tender under Two-bid system for the:

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF OPTICS COMPONENTS – GRATING, LENS, PRISMS, POLARIZERS, MOUNTS, BEAM SPLITTER

Conforming to the specifications as in BoQ Technical.

Tender Documents may be downloaded from the e-Wizard Portal https://mhrd.euniwizarde.com/. Aspiring Bidders who have not enrolled/registered in e-Wizard should enroll/register before participating through the website https://mhrd.euniwizarde.com/. Bidders are advised to go through the instructions provided at "Procedure for Submission of E-tender". [Special Instructions to the Contractors/Bidders for the e-submission of the bids online through this e-Wizard Portal"].

Bidders can access tender documents on the website. For searching in the site, kindly go to Live Tenders option, Click "Advance Search" and select Department as 'IIT Palakkad'. Thereafter, Click on "Search" button to view all IIT Palakkad tenders. Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://mhrd.euniwizarde.com/ as per the timeline below.

No manual bids will be accepted. All tender documents including Techno-Commercial, Technical and Financial bids should be submitted in the e-Wizard portal.

S. No.	Events	Date and Time
1	Publication of the Tender Document	01-12-2023
3	Last Date/Time for submission of ONLINE Bids	22-12-2023, 15:00 hours
4	Opening of Technical Bids	22-12-2023, 15:15 hours

Note:

- 1. The bidder should be a Class-I / Class-II Local Supplier meeting the requirement as per the Order No. P-45021/2/2017-PP (BE-II) issued by the Public Procurement Section, DPIIT, Ministry of Commerce and Industry, GOI dated 16-09-2020.
- 2. Bidders other than Class-I / Class-II Local Suppliers, who may participate in this tender, may be doing so at their own risk. Such bids would not be considered and rejected outright.

TERMS AND CONDITIONS

1	GENERAL	(a) The responsibility of submission of the bids on or before the last date
		shall rest with the tenderer. The institute will hold no responsibility for
		the non-receipt of the bids or the bids received after the date/time
		specified. Any bid received by IITPKD after the bid submission deadline
		prescribed by IITPKD, shall be rejected and returned unopened to the
		Bidder.
		(b) Canvassing or offer of an advantage or any other inducement by any
		person with a view to influencing acceptance of a bid is an offence under
		the Laws of India. Such action will result in the rejection of bid, in
		addition to other punitive measures.
		(c) Each bidder shall submit only one bid, either by himself or as a partner
		in a joint venture or as a member of the consortium. If a bidder or if any
		of the partners in a joint venture or any one of the members of the
		consortium participate in more than one bid, the bids (of both the
		individual and the partnership/consortium/joint venture) are liable to be
		rejected.
		(d) The bidder shall bear all costs associated with the preparation and
		submission of his bid and IITPKD shall in no case be responsible or
		-
		liable for those costs, regardless of the conduct or outcome of the tender
		process.
		(e) IITPKD will respond to any request for clarification or modification
		of the Tender Document that are received up to TWO DAYS prior
		to the deadline for submission of bids prescribed by IITPKD. For
		this purpose, the prospective bidder(s) requiring clarification in the
		Tender Document shall notify IITPKD through the ONLINE Portal
		ONLY. Any such clarification, together with all the details on which
		the clarification had been sought, will be published in the ONLINE Portal ONLY. Deviations, if any, observed by the Institute in the
		submitted bids, from the Terms and Conditions of the Tender
		Document will not be accepted by the Institute.
		(f) Except for any such clarification by the Institute, which is expressly
		stated to be an addendum to the tender document issued by the Registrar,
		IIT Palakkad, no written or oral communication, presentation or
		explanation by any other employee of any of the Sections/Departments
		of the Institute, shall be taken to bind or fetter the Institute.
		(g) The bidder is expected to examine all instructions, forms, terms and
		conditions in the Tender Document. In the event of discovery of any
		missing pages, the bidder shall inform the same to the Section/
		Department concerned. Failure to furnish the information required by the
		Tender Document or submission of a tender not substantially responsive
		to the Tender Document in every respect will be at the bidder's risk and
		may result in rejection of the bid.
		(h) The bidder shall not make or cause to be made any alteration, erasure or
		obliteration to the text of the Tender Document.
		(i) The Supplier shall not, without the prior written consent of the IITPKD,
		assign to any third party, the Contract or any part thereof.
2	COMPOSITION OF THE	(a) The Tender Document comprises of:
	TENDER DOCUMENT	Instruction to the bidders including terms and conditions
		Technical Specifications (Annexure-I)
		2. Undertaking by the Bidder (Annexure-II)
		3. Fall Clause Notice Certificate (Annexure-III)
		4. Annexure regarding Blacklisting/Debarment (Annexure-IV)
		5. Self-Declaration – MII Order (Annexure-V)
3	DOCUMENTS	(a) The Technical, Techno-commercial and Commercial Bids (Cover
	2 3 COMENTS	(w) The reclinically reclinic commercial and commercial bids (Cover

	COMPRISING THE BID	One) and Commercial Bid (Cover Two) shall be submitted ONLINE
		through the e-Wizard Portal.
		(b) Bids submitted in any mode other than ONLINE will be rejected outright.
		(c) Documents establishing the conformity of the terms and conditions of
		the Tender Document shall be provided along with the bid. The
		offer/bids should be sent only for a system or that is available in the
		market and supplied to a number of customers. A list of customers in
		India and abroad with details must accompany the quotations.
		Quotations for a prototype machine will not be accepted.
		(d) Original catalogue (not any photocopy) of the quoted model duly signed
		by the principals must accompany the quotation in the Technical bid. No
		prices should ever be included in the Technical bid.
		(e) Compliance or Confirmation report with reference to the specifications
		and other terms and conditions should also be obtained from the principal.
		(f) Information related to the agency/bidder such as photocopies of the Registration/PAN/GST/TIN shall be furnished.
		(g) The technical bid should consist of all technical details along with
		commercial terms and conditions. No prices should be included in the
		technical bid. Mentioning Prices in the Technical Bid shall lead to DISQUALIFICATION .
		(h) Bidders (or OEM) who are bidding for this tender,
		1) Should have implemented at least ONE ORDER of OPTICS
		COMPONENTS – GRATING, LENS, PRISMS, POLARIZERS,
		MOUNTS, BEAM SPLITTER OR ALLIED COMPONENTS
		during previous FIVE financial years (2018-19, 2019-20, 2020-21,
		2021-22, 2022-23) from Centrally Funded Technical Institutes (IITs,
		NITs, IISc, IISER), DRDO, ISRO, CSIR labs or Government Firms
		or Private Labs in India. Copies of the most recent purchase orders
		and user certificates of successful implementation must be included.
		Copies of financial statements or evidence of turnover must be furnished.
		2) Should have an Average Annual Turnover of Rs 10,00,000 /-
		(RUPEES TEN LAKHS ONLY) during the last THREE financial
		years (2020-21, 2021-22, 2022-23). The bidder shall enclose the
		audited statements of the indicated financial years, which should have
		been certified by a Chartered Accountant or a Competent Authority.
		3) Should submit Digitally signed Tender Document in Cover One.
4	EARNEST MONEY	(a) The bidder shall furnish EMD of Rs. 10,000/- (RUPEES TEN
	DEPOSIT (EMD)	THOUSAND FIVE HUNDRED ONLY) through online payment
		gateway in the E-Wizard.
		(b) Bids not accompanied by EMD shall be DISQUALIFIED.
		(c) The firms who are registered with National Small Industries Corporation
		(NSIC) / or Small Scale Industrial (SSI)/ Micro & Small Enterprises
		(MSEs) are exempted from submitting the EMD. NSIC / MSME registered bidders must submit a copy of a valid NSIC / MSME
		Registered bluders must submit a copy of a valid NSIC / MSME Registration Certificate for exemption of EMD. It will be applicable for
		those bidders who shall produce their own goods or provide their own
		services, and not applicable for trading purposes.
5	PERFORMANCE	(a) The performance security shall be submitted within FIFTEEN DAYS of
	SECURITY	receipt of the material by the IITPKD. The successful bidder shall
		furnish the Performance Security equal to 5% of the order/contract value
		(excluding the value of annual maintenance charges). The Performance
		Security shall be valid all along the warranty period and shall extend
		upto SIXTY DAYS after the date of completion of warranty period. It

		shall be ensured by the successful bidder that the validity of the Performance Security submitted is extended depending on the date of commencement of the Warranty. (b) The performance security shall be an E-Bank Guarantee (Digital Document Execution – DDE MODE by National E-Governance Service Limited) issued by the Indian Scheduled bank acceptable to the IITPKD or a Demand Draft favoring, INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD payable at PALAKKAD. (c) The performance security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The performance security shall be returned to the Supplier not later than fifteen (15) days after its expiration. (d) Failure of the successful Bidder to comply with the requirements shall constitute enough grounds for the annulment of the award and forfeiture of the EMD, in which event the IITPKD may make the award to the next lowest evaluated bid submitted by a qualified Bidder or call for new bids.
6	BID PRICES AND CURRENCY	 (a) Prices must be quoted separately for each equipment/item identified. (b) Price quoted for equipment/items shall include all the costs associated with packing, local transportation from the point of clearance to IITPKD, insurance, loading, unloading and associated delivery charges. The delivery shall be on DOOR DELIVERY basis to the institute including its installation, commissioning, integration and validation. It is the sole responsibility of the supplier to ensure that the equipment is delivered on DDP mode to IIT Palakkad. An undertaking to this effect as in Annexure-II. (c) Prices quoted by the bidder shall be fixed during the validity of the bid. (d) Prices of the equipment/items shall be quoted in Indian Rupees (INR).
7	LETTER OF CREDIT	 (a) Upon the successful Bidder's furnishing of the copy of the Purchase Order duly signed on each page and the Performance Security, for the equipment ordered in foreign currency, IITPKD will open a letter of credit (LC) in a convenient Nationalized Bank in India. For opening of LC necessary information shall be provided by the supplier or its authorized agents. (b) In case the successful bidder is a foreign company and wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor shall submit a Bank Guarantee from a Nationalized Bank of India. The following documents shall be submitted in case of an Indian agent submitting the Performance Security on behalf of his principal: Foreign principal's proforma invoice indicating the commission payable to the Indian agent and nature of after-sales service to be rendered by the Indian agent. Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business. (c) For imported equipment, a Letter of Credit (LC) shall be opened for 100% CIP price on receipt of the acknowledgment of the purchase order. However, 80% of the LC amount only shall be released on proof of the shipment of the consignment with necessary documents to be provided in detail at the time of placing of the purchase order. Balance 20% of the LC amount shall be released upon the receipt of a performance security of 5% of

		the total value of the purchase order and installation, commissioning,
		integration, validation and installation report/certification jointly given by the
		end user and the supplier.
		Any costs associated with the amendments made in the LC as per the request made by the Supplier's should be borne by the supplier.
		Any fluctuation in rates / rate conversions arising due to the amendment
		requests made by the supplier shall be on the supplier and not on the
		institute.
8	PERIOD OF VALIDITY	(d) Bids shall remain valid for a period of 180 DAYS after the date of the
	OF BIDS	deadline for submission of bids prescribed by IITPKD.
		(e) If the deadline is extended due to unforeseen circumstances, the bid
		validity shall be deemed to have extended accordingly.
9	TIME FOR SUPPLY,	(a) The Supplier shall supply the equipment/items within the period
	INSTALLATION,	specified in the tender document i.e. within 06 WEEKS of signing the
	COMMISSIONING AND	purchase order or within the period mutually agreed between IITPKD
	VALIDATION OF THE	and supplier. All the equipment and accessories should be delivered at,
	EQUIPMENTS/ITEMS	IIT PALAKKAD, ELECTRONICS LAB, NILA CAMPUS, PALAKKAD – 678 623.
		(b) The Supplier shall thereafter proceed with the installation,
		commissioning, integration and validation and demonstrate operational
		acceptance of the equipment/items within the period specified. The
		equipment/items shall be installed and commissioned by the successful
		bidder within 20 to 25 days from the date of its receipt.
		(c) The tenderer should indicate clearly the time required for delivery of the
		item. In case there is any deviation in the delivery schedule, liquidated
		damages clause will be enforced or penalty for the delayed supply period
		will be levied.
		(d) In the event of failure of supply of the item/equipment/items within the stipulated delivery schedule, IITPKD has all the right to purchase the
		item/equipment/items from other sources on the total risk of the Supplier
		under the risk purchase clause.
10	PRODUCT UPGRADES	The Supplier shall continue to support and maintain the version/model of the
		Equipment supplied by upgrading the software and the hardware as and when
		amendments are carried out in the existing version or the product is upgraded.
		Whereas upgrades to the software shall be supplied free of cost, the Supplier may
		charge for upgrade in hardware provided it is of major nature. An upgraded
		higher version of the instrument and software related with the instrument shall be
11	DENAL TUES	supplied. If the Supplier fails to complete any of the activities in accordance with the time.
11	PENALTIES	If the Supplier fails to complete any of the activities in accordance with the time specified for it, or any extension of time granted by IITPKD, Liquidated
		Damages Clause shall be invoked.
12	UP-TIME GUARANTEE/	(a) The Supplier should provide up-time guarantee of 95% [24 (hours) X 7 (days)
	DOWNTIME PENALTY	X 365 (days)] basis during the warranty period.
	CLAUSE	(b) The Supplier should provide up-time guarantee of 95% (24 hours/day basis)
		both during warranty. If downtime exceeds the 5% limit, extension of the
		warranty period will be twice the excess down time period.
13	LIQUIDATED	If a firm accepts an order and fails to execute the order, in full or part, as per
	DAMAGES	the terms and conditions stipulated therein, it will be open to the Institute to
		recover liquidated damages from the firm at the rate of 1% of the value of the
		undelivered goods per month or part thereof, subject to a maximum of 5% of
		the value of the undelivered goods. It will also be open to the Institute alternatively, to arrange procurement of the required stores from any source,
		at the risk and expense of the firm, accepted and failed to execute the order
		according to stipulations agreed upon. This will also entail the removal of the
		defaulters' name from the approved/registered list of Suppliers.
14	EFFECT OF FORCE	(a) If the Supplier is prevented, hindered, or delayed from or in performing
لتـــا		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

	MAJEURE	any of its obligations under the Contract by an event of Force Majeure, then it shall notify the IITPKD in writing of the occurrence of such event and the circumstances of the event of Force Majeure within FIFTEEN DAYS after the occurrence of such event. (b) The Supplier, when affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its performance of the Contract and to fulfill its obligations under the Contract, but without prejudice to IITPKD's right to terminate the Contract. (c) No delay or non-performance by the Supplier caused by the occurrence of any event of Force Majeure shall: i. Constitute a default or breach of the Contract; ii. Give rise to any claim for damages or additional cost or
		expense occasioned by the delay or non-performance. (d) If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than THIRTY DAYS or an aggregate period of more than SIXTY DAYS on account of one or more events of Force Majeure, the IITPKD shall have the right to terminate the Contract by giving a notice to the Supplier.
15	EXTENSION OF TIME LIMITS FOR SUPPLY AND MAKING OPERATIONAL, THE EQUIPMENT	 (a) The time limit for supply, installation & commissioning, integration & validation shall be extended if the supply is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following: i. Any occurrence of Force Majeure; ii. Any other matter specifically mentioned in the Contract; (b) By such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Supplier.
16	GOVERNING LAW AND SETTLEMENT OF DISPUTES	 (a) The Contract shall be governed by and interpreted in accordance with the laws of India. (b) Any dispute or claim arising out of/relating to this Contract of the breach, termination or the invalidity thereof, shall be settled by the Hon'ble Courts of Justice at Palakkad. (c) The page number should be marked in all pages serially (including all supporting documents enclosed with the tender document) and the declaration for the same shall be submitted by the bidder as in Annexure-II. (d) IITPKD reserves the right to accept or reject any or all the tenders in part or whole or may cancel the tender at its sole discretion without assigning any reason whatsoever. No further correspondence in this regard will be entertained.

AWARD OF CONTRACT

1	AWADD CDITEDIA	1	HTPKD will award the Contract to the Ridder whose hid
1	AWARD CRITERIA	 2. 3. 	IITPKD will award the Contract to the Bidder whose bid has been determined to be substantially responsive and as per the Order No. P-45021/2/2017-PP(BE-II) dated 16-09-2020 from Department for Promotion of Industry and Internal Trade (Public Procurement Section), Ministry of Commerce and Industry, Govt. of India. The bidder should be a Class-I / Class-II Local Supplier meeting the requirement of minimum 20% Local Content in line with the Public Procurement (Preference to Make in India) Order 2017 No. P-45021/2/2017-PP(BE-II) dated 16-09-2020. The Institute reserves the right to buy different items/quantities from different bidders considering price of individual/group of equipment/items or any other factors
			as decided by the Committee.
2	AWARD OF PURCHASE ORDER	1.	Prior to the expiration of the period of bid validity, IITPKD will issue the Letter of Intent / Purchase Order to the successful Bidder in writing.
		2.	Any amendment(s) in the Purchase Order will be permitted
			within SEVEN DAYS of its issuance. No amendments
			will be permitted beyond this period.
		3.	The Purchase Order will constitute the foundation of the
			Contract.
3	CONTRACT AGREEMENT	1.	Within SEVEN DAYS of receipt of the Purchase Order,
			the successful Bidder shall sign and date its copy on each page and return it to the Purchaser.
		2.	Copy of Purchase Order duly signed and dated by the
		2.	successful Bidder on each page shall constitute the
			Contract Agreement.
4	CONTRACT DOCUMENTS /	1.	All documents forming part of the Contract (and all parts
	AMENDMENT TO CONTRACT		of these documents) are intended to be correlative,
			complementary and mutually explanatory. The Contract
		2	shall be read as a whole.
		2.	The order of precedence of the Contract documents shall be as follows:
			(i) Contract Agreement/Purchase Order
			(ii) All Forms/Annexures
			(iii) equipment/items and their requirement
			(iv) Supplier's Bid
		_	(v) Tender Document
		3.	No amendment or other variation of the Contract shall be
			effective unless it is in writing, is dated, expressly refers to the Contract and is signed by a duly authorized
			representative of each party to the Contract.
			representative of each party to the Contract.

REGISTRAR

TECHNICAL SPECIFICATIONS

Name of the Item :	Optics Components
Quantity:	As listed in the detailed specification below.

S. No.	Items	IIT PKD required Specification
	Optics Components – Grating, Lens, Pris	sms, Polarizers, Mounts, Beam Splitter
1	25,400 Lines/Inch, 2" Square Card, 15/Pack, Holographic Diffraction Grating Film Quantity: 1	Groove Density (grooves/mm):1000 Wavelength Range (nm):400 - 700 Dimensions (inches):2 x 2 Dispersion Angle (°):36 Substrate: Clear Polyester Film Type:Transmission Diffraction Grating Quantity:15 Cards Groove Density (grooves/inch):25400 Dimensions (mm):50.80 x 50.80 Construction:Holographic Grating Length (mm):50.80 Thickness (inches):0.003
2	1200 Grooves, 30mm Square, 500 nm Ruled Diffraction Grating Quantity: 1	Width (mm): 50.8 Groove Density (grooves/mm):1200 Blaze Angle (°): 8.62 Clear Aperture (%):90 Construction:Ruled Grating Length (mm):30.00 Thickness (mm):9.50 ±0.5 Width (mm):30.00 Absolute Peak Efficiency, Typical (%):71, true for p-plane Blaze Wavelength (nm):250 Dimensions (mm):30.0 x 30.0 ±0.5 Coating:Bare Aluminum Direction of Grooves:Parallel to Short Dimension Substrate:Float Glass Type:Reflective Diffraction Grating

20mm VIS, Polarizing Cube Beamsplitter 20mm VIS, Polarizing Cube Beamsplitter Quantity: 1 Quantity: 2 Quantity: 1 Qua			Alignment of Grooves to Edge (°):±0.5
20mm VIS, Polarizing Cube Beamsplitter Quantity: 1 Quantity: 2 Quantity: 4 Quantity: 1 Quan			Peak Efficiency Avg, Typical (%):>65
Dimensions (mm): 20.0 x			Coating Specification:Ravg < 0.5% @ 420 -
20mm VIS, Polarizing Cube Beamsplitter Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 P-Polarization Transmission (%):>90 Substrate: N-SF11 Surface Quality:40-20 Wavelength Range (nm):420 - 680 Clear Aperture (%):90 Construction:Cube Extinction Ratio:500:1 S-Polarization Reflection (%):>99 Surface Flatness (P-V):\(\frac{\chi_0}{\chi_0}\) Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 \(\pma\).10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (*C):-40 to +80 Transmission (%):45 \(\pma\).20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			
Substrate: N-SF11 Surface Quality:40-20 Wavelength Range (nm):420 - 680 Clear Aperture (%):90 Construction: Cube Extinction Ratio:500:1 S-Polarization Reflection (%):>99 Surface Flatness (P-V):2/8 Type: Linear Polarizer Length (mm):200:00 Transmission (%):42 Construction: Polarizing Film Width (mm):20:00 Thickness (mm):0.75 Type: Polarization Tester Wavelength Range (nm):400 - 700 Coating: VIS AR Coated Substrate: Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ± 0.10 Type: Left-Handed Circular Polarizer Construction: Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25:00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ± 2 Dimensional Tolerance (mm):±0.20 Coating Specification: Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99:90 6 M35.5 x 0.50 Machine Vision Mounted Linear Clear Aperture CA (mm):30.50			` ′
Quantity: 1 Quantity: 2 Quantity: 1 Quant			Substrate: N-SF11
Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 Reflection (mi):420 - 680 Clear Aperture (%):90 Construction:Cube Extinction Ratio:500:1 S-Polarization Reflection (%):>99 Surface Flatness (P-V):\(\frac{3}{2}\)/8 Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 \pm.010 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 \pm.2 Dimensional Tolerance (mm):\pm.020 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50	_	20mm VIS, Polarizing Cube Beamsplitter	Surface Quality:40-20
Clear Aperture (%):90 Construction:Cube Extinction Ratio:500:1 S-Polarization Reflection (%):>99 Surface Flatness (P-V):\(\frac{1}{2}\)/8 Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 \pm.0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 \pm.2 Dimensional Tolerance (mm):\pm.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50	3		Wavelength Range (nm):420 - 680
Extinction Ratio:500:1 S-Polarization Reflection (%):>99 Surface Flatness (P-V):\(\frac{1}{2}\)/8 Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 \pm 0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 \pm 2 Dimensional Tolerance (mm):\(\pm 0.20\) Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Class Polarizing Filter Clear Aperture CA (mm):30.50		Quantity: 1	Clear Aperture (%):90
S-Polarization Reflection (%):>99 Surface Flatness (P-V):\(\)/8 Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			Construction:Cube
Surface Flatness (P-V):\(\lambda/8\) Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 \pm 0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 \pm 2 Dimensional Tolerance (mm):\(\pm 0.20\) Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			Extinction Ratio:500:1
Type:Linear Polarizer Length (mm):200.00 Transmission (%):42 Construction:Polarizing Film Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 6 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Clear Aperture CA (mm):30.50			S-Polarization Reflection (%):>99
Polarization Tester 4 Quantity: 1 Polarization Tester Quantity: 1 Directly Polarization Tester Quantity: 1 Directly Polarization Tester Quantity: 1 Directly Polarization Tester Wavelength Range (nm):400 - 700 Coating: VIS AR Coated Substrate: Polymer Film CP42HE Laminate Between Glass Thickness (mm): 2.00 ± 0.10 Type: Left-Handed Circular Polarizer Construction: Laminated Glass Polarizing Film Wavelength Range (nm): 425 - 700 Diameter (mm): 25.00 Operating Temperature (°C): -40 to +80 Transmission (%): 45 ± 2 Dimensional Tolerance (mm): ±0.20 Coating Specification: Ravg < 0.5% @ 425 700nm Polarization Efficiency (%): >99.90 Class Polarizing Filter Glass Polarizing Filter Clear Aperture CA (mm): 30.50			Surface Flatness (P-V):λ/8
Polarization Tester Quantity: 1 Quantity: 1 Quantity: 1 Quantity: 1 Polarization Tester Quantity: 1 Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating: VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			Type:Linear Polarizer
Polarization Tester Quantity: 1 Quantity: 1 Width (mm): 20.00 Thickness (mm): 0.75 Type: Polarization Tester Wavelength Range (nm): 400 - 700 Coating: VIS AR Coated Substrate: Polymer Film CP42HE Laminate Between Glass Thickness (mm): 2.00 ±0.10 Type: Left-Handed Circular Polarizer Construction: Laminated Glass Polarizing Film Wavelength Range (nm): 425 - 700 Diameter (mm): 25.00 Operating Temperature (°C): -40 to +80 Transmission (%): 45 ±2 Dimensional Tolerance (mm): ±0.20 Coating Specification: Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Class Polarizing Filter Glass Polarizing Filter Class Polarizing Filter Class Polarizing Filter			Length (mm):200.00
Quantity: 1 Quantity: 1 Width (mm): 20.00 Thickness (mm): 0.75 Type: Polarization Tester Wavelength Range (nm): 400 - 700 Coating: VIS AR Coated Substrate: Polymer Film CP42HE Laminate Between Glass Thickness (mm): 2.00 ±0.10 Type: Left-Handed Circular Polarizer Construction: Laminated Glass Polarizing Film Wavelength Range (nm): 425 - 700 Diameter (mm): 25.00 Operating Temperature (°C): -40 to +80 Transmission (%): 45 ±2 Dimensional Tolerance (mm): ±0.20 Coating Specification: Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Class Polarizing Filter Class Polarizing Filter Class Polarizing Filter Class Polarizing Filter			Transmission (%):42
Quantity: 1 Width (mm):20.00 Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Class Polarizing Filter Glass Polarizing Filter Clear Aperture CA (mm):30.50	4		Construction:Polarizing Film
Thickness (mm):0.75 Type:Polarization Tester Wavelength Range (nm):400 - 700 Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			Width (mm):20.00
Wavelength Range (nm):400 - 700 Coating: VIS AR Coated Substrate: Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type: Left-Handed Circular Polarizer Construction: Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification: Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter			Thickness (mm):0.75
Coating:VIS AR Coated Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Class Polarizing Filter			Type:Polarization Tester
Substrate:Polymer Film CP42HE Laminate Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter			Wavelength Range (nm):400 - 700
Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Between Glass Thickness (mm):2.00 ±0.10 Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90			
25mm Dia. Left-Handed VIS-Coated Glass Circular Polarizer (CP42HE) Type:Left-Handed Circular Polarizer Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Clear Aperture CA (mm):30.50			
25mm Dia. Left-Handed VIS-Coated Glass Circular Polarizer (CP42HE) Quantity: 2 Quantity: 2 Quantity: 2 Quantity: 2 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Construction:Laminated Glass Polarizing Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 Clear Aperture CA (mm):30.50			Thickness (mm):2.00 ±0.10
Film Cular Polarizer (CP42HE) Quantity: 2 Quantity: 2 Quantity: 2 Film Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Clear Aperture CA (mm):30.50			Type:Left-Handed Circular Polarizer
Wavelength Range (nm):425 - 700 Diameter (mm):25.00 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter			
Quantity: 2 Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Clear Aperture CA (mm):30.50	5		Wavelength Range (nm):425 - 700
Operating Temperature (°C):-40 to +80 Transmission (%):45 ±2 Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Class Polarizing Filter		Quantity : 2	Diameter (mm):25.00
Dimensional Tolerance (mm):±0.20 Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Gless Polarizing Filter		Quantity 1.2	Operating Temperature (°C):-40 to +80
Coating Specification:Ravg <0.5% @ 425 700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Glass Polarizing Filter Class Polarizing Filter			Transmission (%):45 ±2
700nm Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Class Polarizing Filter Class Polarizing Filter			Dimensional Tolerance (mm):±0.20
Polarization Efficiency (%):>99.90 M35.5 x 0.50 Machine Vision Mounted Linear Clear Aperture CA (mm):30.50			Coating Specification:Ravg < 0.5% @ 425 -
6 M35.5 x 0.50 Machine Vision Mounted Linear Clear Aperture CA (mm):30.50			
6 Gloss Polarizing Filter		M35.5 x 0.50 Machine Vision Mounted Linear	• • •
	6	cular Polarizer (CP42HE) Quantity: 2	Diameter (mm):37.50
Filter Thread:M35.5 x 0.50			

	Quantity: 2	Type:Mounted Imaging Filter
		Wavelength Range (nm):400 - 700
		Extinction Ratio:3000:1
		Surface Quality:40-20
		Construction:Black Anodized Aluminum
		Mount Thickness Including Threads (mm):9.6
		Cylindrical lens-12.5mm Diameter x 12.5mm FL
		Cylindrical lens-12.5mm Diameter x 25mm FL
		Cylindrical lens-12.5mm Diameter x 50mm FL
		Cylindrical lens-25 x 50mm,25mm FL
		Cylindrical lens-25 x 50mm,50mm FL
		Aspheric condenser-12.7mm Diameter x 15mm FL
		Ball lens - 3mm Diameter
		Ball lens - 5mm Diameter
		Rod lens - 3mm diameter x 6mm L
	Optical Component Kit	Rod lens - 5mm diameter x 10mm L
		Drum lens- 2.4mm x 3.0mm
		GRIN lens - 1.8mm Dia.x 0.0mm WD
7		Right Angle Prism- 10mm
	(Each component one quantity)	Right Angle Prism- 20mm
		Silvered corner cube-25mm Diameter
		Equilateral prism-15mm
		Dove prism-15mm x 64mm
		Cube beamsplitter - 10mm Sq., 50R/50T
		Cube beamsplitter - 20mm Sq., 50R/50T
		Plate beamsplitter - 35mm Sq., 30R/70T
		Plate beamsplitter - 35mm Sq., 70R/30T
		Broadband Hybrid Diffuser - 12.5mm Diameter
		Ground Glass Diffuser - 15mm Diameter
		First surface Mirror-protected Aluminum, 35mm Sq.
		First surface Mirror-protected Gold, 35mm Sq.
		Hexagonal Light pipe- 4 mm Aperture, 25mm Length High NA
		5mm Extension Tube, Qty. 2
8	C-Mount Component Kit	10mm Extension Tube, Qty. 2
		15mm Extension Tube, Qty. 1

50mm Extension Tube, Qty. 1 100mm Extension Tube, Qty. 1 0.25mm Brass Spacer, Qty. 1 0.5mm Brass Spacer, Qty. 1 1.0mm Brass Space	
0.25mm Brass Spacer, Qty. 1 0.5mm Brass Spacer, Qty. 1 1.0mm Brass Spacer, Qty. 1 2.0mm Brass Spacer, Qty. 1 Eine Thread Focus Tube, Qty. 1 Double Female Threaded Ring, Qty. 1 Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 C-Mount Cube Beamsplitter- 50R/50 C-Mount Plate Beamsplitter- 50R/50 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
0.5mm Brass Spacer, Qty. 1 1.0mm Brass Spacer, Qty. 1 2.0mm Brass Spacer, Qty. 1 Fine Thread Focus Tube, Qty. 1 Double Female Threaded Ring, Qty. 1 Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Prote Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
1.0mm Brass Spacer, Qty. 1 2.0mm Brass Spacer, Qty. 1 Fine Thread Focus Tube, Qty. 1 Double Female Threaded Ring, Qty. 1 Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
2.0mm Brass Spacer, Qty. 1 Fine Thread Focus Tube, Qty. 1 Double Female Threaded Ring, Qty. Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Prote Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Fine Thread Focus Tube, Qty. 1 Double Female Threaded Ring, Qty. Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Prote Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Double Female Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Double Male Threaded Ring, Qty. 1 Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Ring Mount with ¼-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Iris Diaphragm, Qty. 1 Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diar Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Eter, Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Ring Mount with 14-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	1
Microscope Eyepiece Mount, Qty. 1 Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Di Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with ½-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Microscope Objective Mount, Qty. 1 Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Di Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Di ter, Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Diar Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Thin Lens Mount- Holds 12mm Diar Qty. 1 Thin Lens Mount- Holds 12.5mm Diagoty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Diagoty. 1 Thick Lens Mount- Holds 12.5mm Diagoty. 1 Thick Lens Mount- Holds 15mm Diagoty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Qty. 1 Thin Lens Mount- Holds 12.5mm Di Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Diar Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
Qty. 1 Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Eter, Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	neter,
Thin Lens Mount- Holds 15mm Diar Qty. 1 Thick Lens Mount- Holds 12.5mm Eter, Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	ameter,
Thick Lens Mount- Holds 12.5mm Eter, Qty. 1 Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with 1/4-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	neter,
Thick Lens Mount- Holds 15mm Dia Qty. 1 Ring Mount with ¼-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	iame-
Qty. 1 Ring Mount with ½-20 Tap, Qty. 1 C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	meter,
C-Mount Cube Beamsplitter- 50R/50 1 C-Mount Plate Beamsplitter- 50R/50 1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
C-Mount Plate Beamsplitter- 50R/50 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	
1 C-Mount First Surface Mirror- Protect Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	T, Qty.
Aluminum, Qty. 1 Effective Focal Length EFL (mm): EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	T, Qty.
EFL(mm): f/# 12.00mm: 1.00 15.00mm: 1.25	eted
12.00mm : 1.00 15.00mm : 1.25	f /#
15.00mm : 1.25	
18.00mm : 1.50	
12mm Diameter Uncoated, Plano Convex (PCX) 24.00mm : 2.00	
Lens Kit 30.00mm: 2.50	
9 36.00mm : 3.00	
(Each component one quantity) 42.00mm : 3.50	
48.00mm : 4.00	
54.00mm : 4.50	
60.00mm : 5.00	
72.00mm : 6.00	
84.00mm : 7.00	
100.00mm: 8.33	

	12mm Diameter Uncoated, Simple Lens Kit (Each component one quantity)	Effective Focal Length EFL (mm): f/#	
		EFL(mm): f/# Lens Type	
		12.00mm: 1.00 PCX	
		24.00mm : 2.00 PCX	
		36.00mm : 3.00 PCX	
		48.00mm : 4.00 PCX	
		60.00mm : 5.00 PCX	
10		12.00mm: 1.00 DCX	
		24.00mm : 2.00 DCX	
		36.00mm : 3.00 DCX	
		48.00mm : 4.00 DCX	
		72.00mm : 6.00 DCX	
		-12.00mm : -1.00 PCV	
		-24.00mm : -2.00 PCV	
		-48.00mm : -4.00 PCV	
		-12.00mm : -1.00 DCV	

<u>UNDERTAKING BY THE BIDDER</u> (TO BE SUBMITTED ONLY THROUGH ONLINE MODE IN APPROPRIATE FORMAT)

We here by accept all the Terms and Conditions of the Tender Document and strictly adhere to the same in the event of getting Purchase order. We also declare that the Technical and Financial Bids submitted by us has NO DEIVATION from the Tender Terms and Conditions.

We hereby accept that the PRICES OF THE EQUIPMENTS/ITEMS QUOTED ARE AS PER THE INCOTERMS 2022 - DDP MODE, IIT PALAKKAD AND CLAUSE NO.6 OF THE TENDER DOCUMENT.

2000.12.11
We hereby undertake that there are pages, serially numbered, in the submitted tender including the supporting documents. (Please serially number all the pages including blank page, if any).
We have submitted our principal's exclusive authorization letter which is specific for this tender No dated
Note: This letter should be on the <u>letterhead of the quoting firm</u> and should be signed by a Competent Authority.
ANNEXURE-III
FALL CLAUSE NOTICE CERTIFICATE (TO BE SUBMITTED ONLY THROUGH ONLINE MODE IN APPROPRIATE FORMAT)
This is to certify that we have offered the maximum possible discount to you in our Quotation No dated (Please do not reveal the prices here, which will lead to outright
The prices charged for the Stores supplied under tender should under no event be higher than the lowest prices at which the party sells the items of identical description to any other Govt organization/PSU's/Central Govt., /State Govt. Autonomous bodies/Central/state Universities/Central/State Educational Institutions, failing which the "FALL CLAUSE" will be applicable. The institute will look into a reasonable past period to ensure this. In case, if the price charged by our firm is found to be more, IIT Palakkad will have the right to recover the excess charged amount from the subsequent/unpaid bill of the supplier.
Note: This letter of authority should be on the <u>letterhead of the quoting firm</u> and should be signed by a Competent Authority and having the power of attorney.
ANNEXURE-IV
UNDERTAKING REGARDING BLACKLISTING / NON – DEBARMENT Tender No
To, M/s. Indian Institute of Technology Palakkad Ahalia Integrated Campus, Kozhipara, Palakkad, Kerala 678623
We hereby confirm and declare that we, M/s are not blacklisted/ De-registered / debarred by any Government department/ Public Sector Undertaking/ Private Sector/ or any other agency for which we have Executed/ Undertaken the works/ Services.
For Company Name and Seal Authorised Signatory
Note: This letter should be on the letterhead of the quoting firm and should be signed by a Competen

Authority.

FORMAT FOR SELF-CERTIFICATION UNDER PREFERENCE TO MAKE IN INDIA (TO BE SUBMITTED ONLY THROUGH ONLINE MODE IN APPROPRIATE FORMAT)

Format for Affidavit of Self-Certification regarding Minimum Local Content in line with "Make in India" Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

	S/o, D/o, W/o,
Reside	
Hereby	solemnly affirm and declare as under:
Order,	will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) 2017 (hereinafter PPP-MII order) of Government of India issued vide Notification No:P-45021/2/2017 dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any
	ne local content for all inputs which constitute the said goods/services/works has been verified by me and sponsible for the correctness of the claims made therein.
Tick (
	I/We [name of the manufacturer] hereby confirm in respect of quoted items(s) that Local Content is equal to or more than 50% and come under "Class-I Local Supplier" category.
	I/We [name of the manufacturer] hereby confirm in respect of quoted items(s) that Local Content is more than 20% but less than 50% and come under "Class-II Local Supplier" category.
	I/We[name of the manufacturer] hereby confirm in respect of quoted items(s) that Local Content is less than or equal to 20% come under "Non-Local Supplier" category.
For and	d on behalf of(Name of firm/entity)
	rized signatory (To be duly authorized by the Board of Directors) Name, Designation and Contact No.>
	In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate tatutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost

accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the

percentage of local content.]