



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



3421 Meridian Street, North
Huntsville, AL 35811
256-539-8161

BID# 2022-16
DATE: June 21, 2022
INSTRUCTIONS TO BIDDERS

J.F. Drake State Community and Technical College will receive sealed bids for, **Fiber Bragg Grating Sensor Products** herein after described and specified in Exhibit A.

All proposals must be in sealed envelopes and must be received in the Business Office to the attention of Letitia Walker no later than **July 5, 2022** by at **8:30a.m.** The bid opening will be held at **9:00a.m.** in the **Business Office, Bldg. 500**, 3421 Meridian Street, North, Huntsville, Alabama on **July 5, 2022.**

Sealed bids may be **mailed** to J.F. Drake State Community and Technical College, ATTN: ChrisAnn Driskill, Bldg. 500, 3421 Meridian Street, North, Huntsville, AL 35811 or **delivered** to the J.F. Drake State Community and Technical College Business Office located at, Bldg. 500, 3421 Meridian Street, North, Huntsville, AL 35811.

Proposals for furnishing the equipment shall be filled out where called for in the blank spaces on the bid sheet proposal forms. The original signature shall be in longhand and shall be the legal name of the bidder, or the person authorized to sign. The completed form should be without interlineations, alteration or erasure. The original proposal must be submitted in ink. Any additional copy requirements will be identified in the specifications.

No oral, telegraphic or telephone proposals or modifications will be accepted. The bidder, before submitting a proposal, shall carefully examine the specifications to fully inform himself as to all conditions and limitations.

All items delivered shall be free from defects in materials and workmanship. Any and all items found to be defective or failing to meet specifications shall be deemed unacceptable, removed from the premises and replaced by the vendor at no cost to the college.

All bids shall remain in force for a period of **ONE YEAR** with options to renew unless otherwise specified on the proposal form and may be rejected by J. F. Drake Community and Technical College at any time prior to the expiration of this period. J. F. Drake State Community and Technical College reserves the right to reject any/or all bids as may be deemed in its best interest, and reserves the right to award the contract or contracts to other than the low bidder if in the interest of the ultimate economy and standardization to do so.

All bids received shall guarantee items bid to meet or exceed specifications listed. If quoting is based on items other than specified, pictures, description and specifications shall accompany such bids. Bidder shall specify make and model quoted.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



Services furnished as a result of this bid **shall be delivered prices** to purchaser, and must meet or exceed the specifications referenced herein. Items not conforming to specifications may be rejected and returned at the vendor's expense.

Items not delivered in accordance with the general specifications and/or special conditions of this bid concerning quantity and quality, etc., may be purchased on the open market and any increase of cost over the bid price shall be charged to the vendor.

All materials, equipment, etc., shall be new and of kind specified, and shall be in undamaged condition when turned over to the college. Vendor shall be responsible for making any claims for items received damaged in shipment.

All prices submitted on this proposal are to be delivered prices and shall not include any state or local taxes.

Reference to brand name, manufacturer's suppliers, catalog numbers, etc., is intended to set quality standards and does not exclude bids from others as long as quality standards are met. It is the college's intent not to accept a lesser quality than is set forth in these specifications. Manufacturer's specifications shall prevail as if written in full detail.

All bidders are to submit bids on proposal forms furnished by the J.F. Drake State Community and Technical College, which are enclosed. All items must have a unit price and extended price. In case of discrepancies, the unit price shall govern.

Quantities given herein are believed to be correct, but the right to alter or vary these quantities or the right to purchase additional materials above the stated herein at the bid price is reserved.

Questions regarding the formalities of the bid process should be directed to:

ChrisAnn Driskill

Chrisann.driskill@drakestate.edu

(256) 551-7286

Questions regarding the specifications of the bid should be directed to:

Dr. Marina Kingsbury

Marina.kingsbury@drakestate.edu

(256) 551-7285

BIDDERS ARE REQUESTED TO RETAIN THESE SPECIFICATIONS, CONDITIONS AND INSTRUCTIONS FOR FUTURE REFERENCE.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



I. GENERAL INFORMATION

- A. These instructions, conditions, and specifications are in addition to and are part of the instructions and conditions that appear on the printed J.F. Drake State Community and Technical College's "BID SHEET" form, and shall govern the selections of the items listed.
- B. All bids shall be returned on the form provided by the J.F. Drake State Community and Technical College Business Office.
- C. All bid forms shall be signed and dated by the bidder. If not signed and dated, the bid will be considered as non-responsive to the bid request. Two (2) non-responsive bid requests will result in a vendor being removed from J.F. Drake State Community and Technical College's vendor list.
- D. Firm prices shall be bid and include all packing, handling, shipping charges and delivery to the destination shown.
- E. In the event of extension error(s), the unit price will prevail and the bidder's total offer will be corrected accordingly. In the event of addition error(s), the bidder's total will be corrected accordingly. Bidders must check their proposals for any such errors and state the discount(s) in the proposal where applicable. Failure to do so will be at the bidder's risk.
- F. The delivery point shall be to J.F. Drake State Community and Technical College. Each carton or package for each purchase order is to have the following information: Department name, purchase order number and serial number.
- G. If items are installed by the vendor, the vendor is responsible for the prompt removal of all debris resulting from the installation.
- H. The J.F. Drake State Community and Technical College reserves the right not to award on the basis of low bid only. Quality, conformity with specifications, purpose for which required, terms of delivery, terms of payment, transportation, dates of delivery, past service, and experience are among the factors that may be considered in determining the lowest responsive/responsible bidder.
- I. In the event the low bidder(s) refuses to accept the entire requirements without deviation, their bid will then be considered non-responsive. After refusal by the first bidder, the bid may be awarded to the next lowest bidder.
- J. Specifications are written as if in full detail. Use of specific names and numbers is not intended to restrict the bidding of any seller and/or manufacturer, but is solely for the purpose of indication of the type, size, and quality of materials, products, service or equipment considered best adapted to the College's intended use.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



- K. Vendors shall bid on all items within the specified group/category. It is the intent of the J.F. Drake State Community and Technical College to award the bid by groupings/categories or as a total package bid award, however, the College reserves the right to award the bid in any manner, which will best serve the interest of the J.F. Drake State Community and Technical College.
- L. The successful bidder shall guarantee all material and labor for a period of not less than one (1) year against defects in material or workmanship. The guarantee shall commence from the date of acceptance. The successful bidder shall replace any material which is defective (except when it is clearly shown that the defects are caused by misuse and not by the manufacturer) immediately upon notification at no additional charge. Additional warranty considerations may be a factor in the bid award.
- M. The J.F. Drake State Community and Technical College is tax exempt from all tax (Tax I.D. 63-439942). This statement in no way is to be construed as relieving the seller or contractor from their tax obligation.

CERTIFICATION PURSUANT TO ACT NO. 2006-557

ALABAMA LAW (SECTION 41-4-116), CODE OF ALABAMA 1975) PROVIDES THAT EVERY BID SUBMITTED AND CONTRACT EXECUTED SHALL CONTAIN A CERTIFICATION THAT THE VENDOR, CONTRACTOR, AND ALL OF ITS AFFILIATES THAT MAKE SALES FOR DELIVERY INTO ALABAMA OR LEASES FOR USE IN ALABAMA ARE REGISTERED, COLLECTING, AND REMITTING ALABAMA STATE AND LOCAL SALES, USE, AND/OR LEASE TAX ON ALL TAXABLE SALES AND LEASES INTO ALABAMA. **BY SUBMITTING THIS BID, THE BIDDER IS HEREBY CERTIFYING THAT THEY ARE IN FULL COMPLIANCE WITH ACT NO. 2006-557.** THEY ARE NOT BARRED FROM BIDDING OR ENTERING INTO A CONTRACT PURSUANT TO 41-4-116, AND ACKNOWLEDGES THAT THE AWARDING AUTHORITY MAY DECLARE THE CONTRACT VOID IF THE CERTIFICATION IS FALSE.

- N. Bids delivered in Federal Express, UPS, or any other such deliverer's envelope shall be sealed in a separate envelope inside the deliverer's packaging. **The bid name, number and bid opening date shall be written on the outside of deliverer's envelope.** Failure to do this may cause the bid to be inadvertently opened and thus rejected.
- O. The J.F. Drake State Community and Technical College believes in equal opportunity practices which conform to both the spirit and the letter of all laws against discrimination and is committed to nondiscrimination because of race, creed, color, sex, age, national origin, or religion or other classification protected by law.
- P. J.F. Drake State Community and Technical College encourages contractors and suppliers to utilize minority business enterprises when providing goods and/or services. Minority business enterprises are those business controlled by individuals who are members of a minority group and include African Americans, Hispanic Americans, Native Americans and Asian Pacific Americans.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



II. METHOD OF AWARD

- A. The J.F. Drake State Community and Technical College reserves the right to accept the lowest bid on all items combined from one bidder or any feasible combination of bids by items from different companies that result in the low bid.
- B. The award will be made to the lowest responsive and responsible bidder or bidders meeting requirements and specifications. Bidders will be responsible for furnishing all product requirements, requested on the bid, to J.F. Drake State Community and Technical College.
- C. In the event the low bidder refuses to accept the entire requirements in a category without deviation, his bid may then be considered non-responsive.
- D. A refusal by the first low bidder may result in a contract being awarded to the next low bidder meeting requirements and specifications.
- E. J.F. Drake State Community and Technical College reserves the right to accept or reject any or all bids.
- F. The award will be made in accordance with Code of Alabama 1975 Section 41-16-57(b).

NONRESIDENT BIDDER INFORMATION

Code of Alabama, Section 41-16-57(b), provides as follows: The awarding authority in the purchase of or contract for personal property or contractual services shall give preference, provided there is no sacrifice or loss in price or quality, to commodities produced in Alabama or sold by Alabama persons, firms, or corporations. Notwithstanding the foregoing, no county official, county commission, school board, city council or city councilmen, or other public official, state board, or state agency charged with the letting of contracts or purchase of materials for the construction, modification, alteration, or repair of any publicly owned facility may specify the use of materials or systems by a sole source, unless:

- (1) The governmental body can document to the satisfaction of the State of Alabama Building Commission that the "sole source" product or service is of an "indispensable: nature, all other viable alternatives have been explored and it has been determined that only this product or service will fulfill the function for which the product is needed. Frivolous features will not be considered.
- (2) The sole source specification has been recommended by the architect or engineer of record and who also documents that there is no other product available and that the use of the requirement is of an indispensable nature and why.
- (3) All information substantiating the use of a sole source specification is documented in writing and is filed into the project file.

All nonresident bidders must comply with Section 41-16-57(b) in submitting bids to J. F. Drake State Community and Technical College.

- G. The decision of the J.F. Drake State Community and Technical College will be final.
- H. Award will be made on unit price basis, extended price basis, or for other reasons mentioned in I. General Information, Paragraph H that will best serve the interest of the J.F. Drake State Community and Technical College.
- I. Successful bidder agrees to provide correct IRS Form W-9 and State of Alabama Disclosure Form to the College when notified of the bid award.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



III. CONTRACT PERIOD

A. The contract period shall be for **ONE YEAR** commencing on the date of the award.

B. The purpose of this is to establish a 12-month contract with an option to issue a second and third 12-month contract under the same pricing, terms and conditions. The second and third contract, if requested by the college and agreed upon by the vendor, would begin the day after the first or second contract expires. Any successive contract must have the written approval of both the college and the vendor no later than 30 days prior to the expiration of the previous contract.

IV. PRICING

A. Prices are to be quoted by the "Unit" indicated on the face of the "Bid Sheet" form.

B. Prices are not to exceed two (2) decimal places.

C. The bidder offers and agrees to furnish all items upon which prices are quoted, at the price stated opposite each item, in the quantity as stated on the bid; delivered to the College at 3421 Meridian Street, Huntsville, AL 35811, in amounts ordered.

D. J.F. Drake State Community and Technical College reserves the rights to rebid or re-negotiate any item(s) if price(s) are beyond the amount anticipated or negotiations are unsatisfactory.

E. Prices to include delivery to J.F. Drake State Community and Technical College, 3421 Meridian Street, Huntsville, AL 35811 unless otherwise specified. Each carton or package for each purchase order to have the following information: College Name, Purchase Order Number, Serial Number (if applicable)

F. College will not accept prepay terms for the items and services in this bid.

V. QUANTITY

A. The quantities of items specified herein are based upon estimated use. Because quantities listed are estimated, they may be increased or decreased according to needs of the College.

B. Bidders are cautioned that to incur financial obligations by purchasing materials not normally stocked for this bid will not be reason for reimbursement of costs incurred.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



VI. METHODS OF PURCHASING

Purchase orders will be issued as authorization for all purchases. If the supplier fails to deliver items within the time specified, J.F. Drake State Community and Technical College reserves the right to award the bid to the next lowest responsible bidder.

VII. BACK ORDERS

- A. Items temporarily out of stock shall be a minimum. When this occurs, the designated representative may determine the method used to obtain such items. Alternative procurement methods will only be utilized for temporary shortages.
- B. If items are out of stock, the designated representative will be notified, as early as possible, in writing. Excessive backorders will be grounds for contract cancellation.

VIII. CANCELLATION

No item in the bid is to be canceled without the prior consent of the J.F. Drake State Community and Technical College.

IX. DEFAULT

- A. If at any time the vendor makes a delivery that is not in accordance with the instructions, conditions, and specifications set forth by the J.F. Drake State Community and Technical College, without the consent of said J.F. Drake State Community and Technical College, such delivery shall constitute grounds for the cancellation of the contract and/or removal of this vendor from the J.F. Drake State Community and Technical College's vendor list, for not less than one (1) year.
- B. Any vendor issuing any type of gift, stamps, premiums, or other type of favor to any employee of the J.F. Drake State Community and Technical College shall constitute grounds for the cancellation of the contract and such vendor shall be excluded from the mailing list of all purchases of the J.F. Drake State Community and Technical College.

X. INDEMNITY

The successful bidder shall indemnify and hold harmless J. F. Drake State Community and Technical College, its officers and employees from all loss, claims, suits or actions of every kind or character made upon or brought against J.F. Drake State Community and Technical College, or its officers and employees by any party or parties as a result of any act, error, omission or negligence of said responsible bidder or its servants, agents and subcontractors.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



XI. SPECIAL REQUIREMENTS

- A. J.F. Drake State Community and Technical College reserves the right to purchase any items inadvertently omitted, from the vendor who is awarded a particular category.
- B. J.F. Drake State Community and Technical College reserves the right to cancel the contract or any category thereof at any time without penalty if service, quality, or delivery is not satisfactory and if continuation of the contract or category is determined to be inconsistent with the best interests of J.F. Drake State Community and Technical College.
- C. **IF APPLICABLE: All contractors submitting proposals for service type and/or construction type contracts, shall provide a copy of Huntsville City, Madison County, and all required State of Alabama license(s). License numbers and residency shall be written on proposal/quote/bid sheet.**

A “General Contractor” is defined to be one who, for a fixed price, commission, fee, or wage undertakes to construct or superintend or engage in the construction, alteration, maintenance, repair, rehabilitation, remediation, reclamation, or demolition of any building, highway, sewer, structure, site work, grading, paving or project or any improvement in the State of Alabama where the cost of the undertaking is fifty thousand dollars (\$50,000) or more, shall be deemed and held to have engaged in the business of general contracting in the State of Alabama.

- D. IF APPLICABLE: All proposals shall include Huntsville City Business License number or other applicable Alabama county license number and all required State of Alabama license numbers.
- E. Successful bidder will be required to submit a copy of its General Liability insurance policy.
- F. Bidders may be disqualified and rejection of proposals may occur for any of (but not limited to) the following reasons:
 - a. Failure to use the bid forms furnished by the J.F. Drake State Community and Technical College.
 - b. Lack of signature by an authorized representative on the bid form.
 - c. Failure to properly complete the bid form.
 - d. Lack of vendor compliance.
 - e. Evidence of collusion among bidders
 - f. Unauthorized alteration of the bid form.
- G. The J.F. Drake State Community and Technical College shall have no obligation to purchase items or services under any contract until funds are appropriated for the applicable fiscal year.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



-
- H. Where both Instructions to Bidders (ITB) and Specifications relate to the same thing, the Specifications will prevail; that is, the specific language will take precedence over the more general wording, however, where both the ITB and Specifications may be given reasonable effect, both are to be retained.
- I. J.F. Drake State Community and Technical College has the option in place to make payment via Purchasing Card instead of a check for purchases from this solicitation. This form of payment significantly reduces payment time to three to five days once services are rendered and the invoice is submitted. Unless exception is noted in the bid response, the bidder, by submitting a bid agrees to accept the Purchasing Card as an acceptable form of payment and may not add additional services fees/handling charges to purchases made with the Purchasing Card.
- J. Notwithstanding any other provision in this agreement, the parties acknowledge and agree that the terms and commitments contained herein shall not constitute a debt of the State of Alabama in violation of Section 213 of the Constitution of Alabama of 1901, as amended by Amendment No. 26
- K. It is further agreed that if any provision of this Agreement shall contravene any statute or Constitutional provision, either now in effect or which may be enacted during the term of this Agreement, then the conflicting provision of the Agreement shall be null and void.
- L. The bidder acknowledges and agrees that its sole and exclusive remedy for any monetary claim or any claim for which College has sovereign immunity that may arise from or relate to this Agreement is to file a claim with the Board of Adjustment of the State of Alabama
- M. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama without giving effect to any choice- or conflict-of-laws provisions or rules (whether of the State of Alabama or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than those of the State of Alabama.
- N. These terms and conditions shall supersede any contrary language in any agreement entered into by the parties. All terms shall be reduced to writing and will not rely on any oral terms, nor shall any oral terms or agreement be incorporated herein.
- O. In accordance with the recommendations of the Governor and the Attorney General of the State of Alabama, the parties shall consider settling all disputes arising from or related to this agreement by using appropriate forms of non-binding alternative dispute resolution.
- P. In the event of proration of the fund from which payment under which this agreement is to be made, the agreement will be subject to termination.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



XII. MANUFACTURER'S NAME AND SUBSTITUTIONS

- A. Any bidder wishing to supply alternate equipment other than that specified shall submit a request for substitution to the J.F. Drake State Community and Technical College at the Pre-Bid Conference or at least ten (10) days prior to the BID OPENING DATE if a Pre-Bid Conference is not scheduled.
- B. If APPLICABLE - Bidders requesting such substitutions are cautioned to examine mechanical and electrical plans and building conditions to determine if such substitution will require changes in mechanical or electrical or require rearrangement. If any of the above changes would be involved, a layout of such changes and any additional cost (itemized) must be submitted with the request for substitution. If proposed substitutions entail additional cost which was not submitted with the request for substitution and approval is granted, bidders shall be responsible for such costs.
- C. In addition, a request for substitution must be accompanied by the manufacturer's specifications and a "Substitution Request Form" which provides the J.F. Drake State Community and Technical College with a detailed description of the manner in which proposed substitution conforms and/or varies from the item specified. No request for substitution will be considered without an accompanying "Substitution Request Form."
- D. It is understood by the J.F. Drake State Community and Technical College that no agent, dealer, broker or agency may bind a manufacturer beyond the manufacturer's own printed literature. Therefore, any party submitting a Substitution Request Form stating compliance with a feature specified for the prime specified item or as an option for that item in the manufacturer's literature, may be accompanied by a letter on the Manufacturer's own letterhead stating that the manufacturer shall comply with the specified feature and such compliance shall not adversely affect the manufacturer's product performance, reliability, durability, appearance or affect the warranty.
- E. If the substituted item is approved and subsequently installed and upon final inspection is found to deviate from the specifications in a manner not detailed in the "Substitution Request Form", the Contractor shall, at the discretion of the College, bring the equipment into compliance with the specifications at his own cost. In consideration of the job stage at the time of final inspection, the Contractor shall take no more than 5 working days to make this replacement. Bidders are encouraged to review the "Substitution Request Form" prior to using such items in their bid. Awarded Contractor shall be responsible for deviations not detailed in the "Substitution Request Form" submitted FROM ANY SOURCE. Approval of submittals by the J.F. Drake State Community and Technical College does not relieve the Contractor of this obligation. The "Substitution Request Form" can be found at the end of this document.
- F. No request for substitution will be considered after the Pre-Bid Conference or after 10 days prior to the BID OPENING DATE if a Pre-Bid Conference is not scheduled, except in instances where the item is no longer available. The J.F. Drake State Community and Technical College Business Office or designated representative will approve exceptions when availability of product is in question.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



J.F. DRAKE STATE COMMUNITY AND TECHNICAL COLLEGE SUBSTITUTION REQUEST FORM

VENDOR NAME _____ BID # _____

BID NAME _____

ITEM # _____

ITEM DESCRIPTION _____

REQUESTED SUBSTITUTE _____

HOW IS SUBSTITUTE SIMILAR* _____

HOW IS SUBSTITUTE DIFFERENT* _____

MANUFACTURERS SPECS MUST BE INCLUDED.

APPROVAL DATE

APPROVED BY



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



Proposal Check List

The following is a checklist of requirements developed by the J.F. Drake State Community and Technical College that may assist in the preparation of your proposal. This list is not all-inclusive and is made available for your convenience. The Instructions to Bidders and Addenda (if issued) specify all proposal requirements and should be read thoroughly to ensure that all bid requirements are met. The following list identifies some common reasons why bids are rejected and considered non-responsive:

- Bid opening date and time (late submission)
- Original signatures and date on proposal required (copies submitted)
- Proposal should be without: interlineations, alteration or erasure (do not use white out, do not line through and initial, do not change figures on pricing sheet, etc. Pricing sheet should be without corrections.) ***
- Product specifications do not meet requirements
- Incomplete bids ***
- Bids not identified on UPS, Federal Express, etc. packages, thus inadvertently opened ***
- Copies of licenses not submitted when required along with license number written on bid sheet ***
- Failure to use bid forms supplied with bid packet
- Failure to fill out bid form correctly
- Late substitution requests (see X. Manufacturer's Name and Substitutions) ***

Note: *** - Most common reasons why bids are rejected.

Please read the Instructions to Bidders for specific requirements as they can change from bid to bid. The goal of the J.F. Drake State Community and Technical College is to provide for fair and open competition. Following the Instructions to Bidders will ensure that all proposals are considered.

Thank you.



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



COMPANY _____

ADDRESS _____

PHONE _____ FAX _____

CELL # _____

EMAIL ADDRESS _____

CITY OF HUNTSVILLE LICENSE # _____

MADISON COUNTY BUSINESS LICENSE # _____

SIGNATURE

PRINTED NAME

TITLE

DATE



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



BID 2022-16

Specifications for Fiber Bragg Grating Sensor Products

<u>Description</u>	<u>Quantity</u>
K-FS70PKF-2-ARM-YES-FC-2.0-0.5-0.5-YES-2	2
FS70PKF - Configurable Array of FBG in Peek Coated Fiber - Fiber Bragg Grating (FBG) strain sensing elements on a bare fiber with peek coating and based on newLight® technology. - For measuring strain in several different points where constrains such as small space, high strain, etc., exist, while roughness is a must. - Fixed FBG distances of 1m and selectable FBG wavelength options. - Definable lead in and lead out cable types, lengths and connectors.	
FS70PKF group choice 2 Group 2 (9 fbgs) Cable type choice ARM Armor Select left cable: Yes/No YES Yes Left connector FC Optical connector FC/APC Left cable length 2.0 2.0 Left fiber length 0.5 0.5 Right fiber length 0.5 0.5 Select right cable: Yes/No YES Yes Right cable length 2.0 2.0 Right connector FC Optical connector FC/APC Total cable length 4.0 4.0 Total splice number 2.0 2.0 Total FBGs number 9.0 9.0	
K-FS76ARM-4.0-FC-2.0-FS62RSS-10-1.0-FS62 4	4
FS76ARM - Configurable Strain and Temperature Sensor Array with Armor Cable - Arrays of newLight® strain and temperature sensors with armor cable. - Selectable number of sensors, sensor types and wavelengths. - Definable cable lengths, distances between sensors and connector types.	
Number of sensors 4.0 4.0 Left Connector FC Optical connector FC/APC Left Cable Length 2.0 2.0 Sensor 1 FS62RSS FS62RSS Wavelength of sensor 1 10 1510 nm Cable between sensor 1 and 2 1.0 1.0 Sensor 2 FS62RSS FS62RSS Wavelength of sensor 2 20 1520 nm Cable between sensor 2 and 3 2.0 2.0	



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



Sensor 3 FS63RTS

_1
FS63RTS with calibration
Wavelength of sensor 3 25 1525 nm
Cable between sensor 3 and 4 1.0 1.0
Sensor 4 FS63RTS

_1
FS63RTS with calibration
Wavelength of sensor 4 35 1535 nm
Right Cable Length 2.0 2.0
Right Connector FC Optical connector FC/APC
Number of Splices 3.0 3.0
Length btw 1st and last sensor 4.0 4.0
Total Cable Length 8.0 8.0

K-SYS-FSA

K-FS76ARM with the following specifications:
- 2 x FS62RSS SM - Rugged Strain Sensor Surface mount option
CWL: 1540nm and 1550nm
- 2 x FS63RTS - Rugged Temperature Sensor
CWL: 1565nm and 1575nm
3 Armor splices (Ø8 x 200mm)
Ø3mm Armor cable lead-in and lead-out: 2m
2 FC/APC connectors
Distance between sensors according with schematic below.

4

FS22DI RENTAL

Rent of Equipment:
Equipment:
- 1-FS22DI-ST/4CH

1



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



Cont'd

1-CATMAN-EASY

1

Software package for measurement data acquisition.

Main features:

- Convenient channel parameterization using TEDS and Sensor Database
- Measurement job parameterization
- Individual Visualizations
- Event and Alarm handling
- Live data analysis
- Save data in different formats (e.g. catman, Excel, ASCII, DIAdem, MDF 3/4, MATLAB).

Required operating system: Windows 10.

Including software maintenance for the first 12 months from the date of delivery. Prerequisite: Registration of catman by the customer in the software or specification of user data when ordering



J.F. DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE



Fiber Bragg Grating Sensor Products

Bid No (2022-16)

Product(s) and/or Services(s)	Bid Amount
Qty 2: K-FS70PKF-2-ARM-YES-FC-2.0-0.5-0.5-YES-2	\$ _____
Qty 4: K-FS76ARM-4.0-FC-2.0-FS62RSS-10-1.0-FS62	\$ _____
Qty: 2 total: Sensor 3 FS63RTS	\$ _____
Qty 4: K-SYS-FSA	\$ _____
FS22DI RENTAL	\$ _____
1-CATMAN-EASY	\$ _____
Delivery	\$ _____
Total	\$ _____

All prices must include delivery and installation. All required attachments must accompany Bid Responses Form.