



सीएसआईआर - केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान

196, राजा एस सी मल्लिक रोड, कोलकाता - 700 032, भारत

CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE

196, Raja S C Mullick Road, Kolkata - 700 032, India



CONFIDENTIAL

Order No. P/NC/57/PB/TT/24-25 & P/NC/84/NP/DR/24-25

Dated 27/03/2025

To,
M/s. Hottinger Bruel & Kjaer GmbH,
Im Tiefen See 45,
64293 Darmstadt, Germany
Tel: +49 6151 803 0
E-mail arun.sampath@hbkworl.com

Sub: Award of contract for the Supply, Installation and Commissioning of "HBK QuantumX 16 Channel Strain Gage Bridge Amplifier, 8 Channel Universal amplifier of Quantum X and Portable 8-channel FBG interrogator for field application with data acquisition software"

Ref. Your offer no. **9999772697** and **9999779147** dated **23/03/2025** and **21/02/2025** against our tender no. **P/NC/84/NP/DR/24-25** dated **22/03/2025** (Published on CPP Portal with Tender ID. **2025_CSIR_793081_1**) and **P/NC/57/PB/TT/24-25** dated **07/03/2025** (Published on CPP Portal with Tender ID. **2025_CSIR_225298_1**) submitted on CPP Portal and all communication between CSIR-CGCRI and M/s. Spectris Technologies Pvt. Ltd. (HBK India Division), Chennai, including and up to their revised Quotation through email dated **25/03/2025**.

Dear Sir/Madam,

I am directed to inform you that after evaluating the bid documents submitted by you as referred above, The Director, CSIR-Central Glass & Ceramic Research Institute, Kolkata is pleased to inform you that you have been selected as the successful bidder for the supply of HBK QuantumX 16 Channel Strain Gage Bridge Amplifier, 8 Channel Universal amplifier of Quantum X and Portable 8-channel FBG interrogator for field application with data acquisition software. The total purchase price shall be **EUR 62,448.00**, as indicated in your financial bid submitted on the CPP portal, in accordance with the procedures intimated in the relevant bid documents.

Accordingly, you are requested to kindly arrange for the Supply, Installation and Commissioning of the following items;

Sl. No.	Item Description	Qty.	Unit Rate (EUR)	Total (EUR)
01	<p>K-FS22-03-500-820</p> <p>Interrogator specifically designed to interrogate Fiber Bragg Grating (FBG) based sensors in industrial environments, employing proven continuous swept laser scanning technology. FS22 Industrial BraggMETER includes a NIST traceable wavelength reference that provides continuous calibration to ensure system accuracy over long term operation.</p> <p>With high dynamic range and output power to allow high resolution to be attained even for long fiber leads and lossy connections.</p> <ul style="list-style-type: none"> High interrogation capacity Real-time operating system Full control through SCPI Commands <p>Housing and connections 03, Standard, opt. connect. SC/APC Sample rate 500, Dynamic (up to 1000 S/s) Number of optical connectors 820, 8 connectors HSN Code: 90314990</p>	01	29,805.00	29,805.00
02	1-MX1615-PAKAP	01	13,337.00	13,337.00



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DID Lines : 2483 8079/8082 फ़ैक्स/Fax : (033) 2473 0957,2473 6082,2483 7339,2483 8085 ई मेल/Email : dir_office@cgcri.res.in
वेब साइट/Website : www.cgcri.res.in

भण्डार एवं क्रय अधिकारी/Stores & Purchase Officer
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	<p>Product Package including QuantumX 16 channel Strain Gage Bridge Amplifier MX1615; Supports the following transducer technologies on all channels:</p> <ul style="list-style-type: none"> • Strain gauge in 1/4, 1/2, and full bridge circuit, variable bridge excitation voltage (DC or 1200Hz Carrier Frequency), internal quarter bridge completion (120 or 350 ohm); • voltage (+/- 10 V); • PT100, Resistance; • potentiometer, • data rate: up to max. 20 kS/s; • automatic transducer identification: TEDS; <p>General:</p> <ul style="list-style-type: none"> • 1 x Ethernet (PTP), 2 x Firewire; • Voltage supply: 10...30 V DC, max. 12 W; • Factory calibration data in accordance with DIN/ISO 10012 saved on the device (generate certificate using MX Assistant) <p>Product bundle is 15% discounted and also includes:</p> <ul style="list-style-type: none"> • power supply (1-NTX001); • 16 push-in terminals (1-CON-S1015); • Ethernet cross-over cable (1-KAB239-2); • catman®AP software from HBM; <p>A 12 month software maintenance is included with the new software –also when this is not stated as a separate line on your quote. HSN Code: 90318080</p>			
03	<p>1-MX840B 8-channel universal amplifier of the QuantumX family; Supports the following transducer technologies (total of 8 channels):</p> <ul style="list-style-type: none"> • 8 x strain gage full or half bridge (DC or CF with 4.8 kHz); • 8 x IEPE (CCLD, ICP); • 8 x piezoresistive full bridge; • 8 x resistance thermometer: PT100, PT1000; • 8 x thermocouples type K, N, R, S, T, B, E, J, C; • 8 x resistance: 5000 Ohm; • 8 x potentiometric transducer; • 8 x inductive full or half bridge; • 8 x LVDT; • 8 x voltage: 100 mV, 10 V and 60 V; • 8 x current: 20 mA; • 4 x digital counter, rotary encoder, frequency, SSI; • 1 x CAN bus on channel 1: receive/transmit; <p>The following applies for each channel:</p> <ul style="list-style-type: none"> • Data rate: max. 40 kS/s (signal bandwidth: 7.2 kHz); • Digital low pass filter: Bessel, Butterworth; • TEDS support: automatic sensor identification; • Sensor supply: 5...24 V, 0.7 W (Module: 2 W); • All inputs galvanically isolated; • Socket: DSubHD-15; <p>General connections:</p> <ul style="list-style-type: none"> • 1 x Ethernet with PTP support; • 2 x FireWire; 	02	9,653.00	19,306.00



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<ul style="list-style-type: none"> Voltage supply: 10...30 V DC, < 12 W; Factory calibration data in accordance with DIN/ISO 10012 saved on the device (generate certificate using MX Assistant) <p>Optional accessories:</p> <ul style="list-style-type: none"> AC/DC power adapter 24V/30 W: 1-NTX001; Connection of thermocouples: i-SCM-TCK/J/T/E; Strain gage quarter bridge: 1-SCM-SG120/350/1000; Connection of 300 V CAT II: 1-SCM-HV; Connection of IEPE or 10 V over BNC: 1-SUBHD15-BNC. <p>HSN Code: 90318080</p>			
Ex-Works, Darmstadt, Germany Price in EUR			62,448.00

The Purchase Order shall be governed by the General Conditions of Contract (GCC) read with the relevant Special Conditions of Contract (SCC) as stipulated in CSIR-CGCRI Tender Document P/NC/84/NP/DR/24-25 dated 22/03/2025 (Published on CPP Portal with Tender ID. 2025_CSIR_793081_1) and P/NC/57/PB/TT/24-25 dated 07/03/2025 (Published on CPP Portal with Tender ID. 2025_CSIR_225298_1).

The Technical Specifications and other allied features of the ordered goods and services shall strictly conform to those specified in the aforesaid CSIR-CGCRI Tender Document and complied by Supplier in their Offer /Quotation /Bid No. 9999772697 and 9999779147 dated 23/03/2025 and 21/02/2025 and all communications between CSIR_CGCRI and M/s. Spectris Technologies Pvt. Ltd. (HBK India Division), Chennai, including and up to their revised Quotation through email dated 25/03/2025.

Attention of the Supplier is also invited to the following conditions:

1	Price basis	Ex-Works, Darmstadt, Germany INCOTERMS 2020
2	Delivery period	The delivery of all the ordered goods shall have to be completed within 24 weeks from the date of Letter of Credit.
3	Taxes & Duties	All import duties and taxes shall be borne by Purchaser. All taxes and duties in the country of export shall be borne by supplier.
4	Freight and Insurance	The ordered goods shall be shipped by supplier on freight -to-pay basis through the Purchaser's nominated forwarder, whose details shall be shared with Supplier once the ordered goods are ready for dispatch. The cargo insurance shall be arranged by Purchaser and all charges in this regard shall be borne by Purchaser.
5	Custom clearance	The import consignment shall be cleared from Indian customs by the Purchaser through their own clearing agent. In order to ensure timely customs clearance, Supplier shall provide the following details at least 7 days prior to arrival of vessel at destination seaport. <ol style="list-style-type: none"> Airway Bill No. and date. Complete set of dispatch documents. Name and address of Local agent of Supplier's nominated forwarder, from whom delivery of the cargo is to be requested.
6	Installation and Commissioning	The ordered goods shall be installed and commissioned by Supplier's engineers within 30 days from the date of arrival of the consignment at final destination as defined in the SCC. Once installation is completed, necessary



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		training shall be imparted to Purchaser's Scientists/Technical Officers etc. (3-4 personnel) for effective operation and maintenance of the equipment/system.
7	Warranty	The ordered goods shall be covered under on-site comprehensive warranty for a period of 12 months (twelve months) to be effective from the date of successful installation and commissioning of the complete system. Other aspects of the warranty clause are detailed at GCC Clause 2.21 read with the relevant SCC.
8	Payment terms	An irrevocable letter of credit for EUR 62,448.00 covering 100% Ex-Works, Darmstadt, Germany Price shall be established in favour of the Supplier. The payment shall be released in following manner. <ul style="list-style-type: none">On Shipment: 80 percent (Eighty percent) of the Contract Price of all the ordered Goods shipped shall be paid upon submission of documents specified in the LCOn Acceptance: 20 percent (twenty percent) of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security. The L/C will be confirmed at the Supplier's cost, if requested specifically by the supplier. All bank charges abroad shall be to the account of the beneficiary i.e. Supplier and all bank charges in India shall be to the account of the opener i.e. purchaser. If L/C is requested to be extended/ reinstated for reasons not attributable to the Purchaser, the charges thereof would be to the suppliers' account.
9	Performance Bank Guarantee / Performance Security	Within 21 days of issue of this Purchase Order, Supplier shall furnish a Performance Security for 3% of the contract value . Other aspects of the Performance Security clause are detailed at GCC Clause 2.13 read with the relevant SCC.

You are requested to execute the necessary agreement within fourteen days from the date of issue of this letter in the prescribed agreement form. Special adhesive stamp of ₹10 (Rupees Ten) and revenue stamp of Rupee One shall be affixed on the prescribed agreement form.

Till such time, the agreement is executed, this Purchase Order shall constitute a legally binding contract between you and the CSIR-Central Glass & Ceramic Research Institute, Kolkata, India.

You are now requested to send the Order Acknowledgement/Proforma Invoice on Ex-Works, Darmstadt, Germany value. The Performance Security for 3% of the contract value/Ex-Works, Darmstadt, Germany value is to be furnished within 21 days from the date of issue of this Purchase Order.

Yours truly

[B Dhar]

Stores & Purchase Officer

For & on Behalf of The Council of Scientific and Industrial Research

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