

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
INDIAN INSTITUTE OF REMOTE SENSING
IIRS
DEHRADUN
PURCHASE & STORES
INVITATION TO TENDER**

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Date :09/10/2014

M/s

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Our Ref No : GIRS 2014-000132-01

Tender Due: 15:00 Hrs IST on 28/10/2014

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure(Form No:)

S.No.	Description of Items with Specifications	Unit	Quantity
1	Supply, Installation, Demonstration & Training of Inertial Measurement Unit (IMU) with accessories and Software (Details of Specifications & Requirements are enclosed)	NOS.	1


DELIVERY AT: IIRS

MODE OF DESPATCH DOOR DLVRY

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS NIL

SPECIFIC TERMS


V.V. NARAYANAN KUTTY
PURS. & STORES OFFICER
For and on behalf of the President of India
The Purchaser

O/C

GENERAL TERMS & CONDITIONS:

1. Material should be delivered & installed at IIRS.
2. Payment will be made within 30 days from date of receipt of supply and acceptance of the material for orders value upto Rs. 2.0 lakhs. For order value above 2.0 lakhs, 90% payment within 30 days and 10% against Bank Guarantee for the warranty period.
3. We cannot furnish Form C/D. Please indicate the applicable percentage of Trade tax / VAT in your quotation, if applicable. Otherwise the quoted rate will be considered as inclusive of all taxes.
4. Clearly mention the Make/Brand of the item in your quotation. Please enclosed the Authorization Certificate from the principal of the quoted Make/Model along with the quotation.
5. Also clearly mention the exact delivery period and validity of your offer shall be min. 60 days
6. Compliance Statement of the quoted model may please furnish along with the quotation, without compliance statement quotation will not be considered.

SPECIFICATION AND REQUIREMENTS SHEET

Sl.No	Description	Quantity Required
	SUPPLY, INSTALLATION, DEMONSTRATION and TRAINING of IMU along with accessories and software	01 Set

IMPORTANT INSTRUCTIONS

I	Competitiveness of the Bidder would be evaluated on the basis of the FOR Destination value of all the items taken together.
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Sl.No	Description	Specifications
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Navigation requirements

a.	Typical position accuracy	Horizontal: ± 3 m RMS or better, vertical: ± 5 m RMS or better
b.	Typical velocity accuracy	± 0.1 m/s or better
c.	Typical attitude accuracy	± 0.3 deg RMS roll & pitch or better ± 1 deg RMS heading or better
d.	Data output rate	up to 500 Hz or more

General specifications

a.	Interface options	USB 2.0 or RS232
b.	Other sensor integration	Should have an internal GPS for correcting accumulating bias
c.	Operating temperature	-40 °C to $+50$ °C
d.	Physical parameter of instrument	As compact as possible ¹
e.	Weight	Less than 100grams
f.	Shock limit	500 g or better
g.	Software ²	<ul style="list-style-type: none"> ✓ compatible with XP/Vista/Win7/Win8 ✓ capable to remove noise removal ✓ Export data to raw, ASCII, and other generic format
h.	Features	<ul style="list-style-type: none"> ✓ Should perform Kalman filtering with gyro and accelerometer ✓ Should be capable to measure noise
i.	Warranty and Services (after sale service)	<ul style="list-style-type: none"> ✓ Should have warranty for 1 year or more. ✓ Should provide strong service which includes adequate training & calibration for each component, repairing/installation of hardware and software. ✓ Technical support for 3 years or more (optional)³
j.	Accessories	<ul style="list-style-type: none"> ✓ Need to have customary accessories such as cables/data transfer cable, connectors, battery charger adapter, data cards/USB flash drive, starter kit, etc.

Other Specifications

		Accelerometer	Gyroscope	Magnetometer
a.	Measurement range	± 5 g	$\pm 300^0$ /sec	± 3 Gauss
b.	In-run bias stability	± 0.05 mg	10^0 /hr	-
c.	Initial bias error	± 0.002 g	$\pm 0.05^0$ /sec	± 0.003 Gauss
d.	Scale Factor Stability	$\pm 0.05\%$	$\pm 0.05\%$	$\pm 0.1\%$
e.	Noise density	$100 \mu\text{g}/\sqrt{\text{hz}}$	0.005^0 /sec/ $\sqrt{\text{hz}}$	$100 \mu\text{Gauss}/\sqrt{\text{hz}}$
f.	Alignment error	$\pm 0.05^0$	$\pm 0.05^0$	$\pm 0.05^0$
g.	Sampling rate	4kHz or more	4kHz or more	50 Hz or more

Internal GPS Specifications

a.	GPS receiver type	<ul style="list-style-type: none"> ✓ 50 or more channel Channels ✓ SBAS: Should be GAGAN enabled
b.	Data output rate	Up to 4Hz or more
c.	Time-to-First-Fix	As less as possible
d.	GPS velocity accuracy	0.1 m/sec or better
e.	GPS heading accuracy	0.5^0 or better

GPS horizontal position accuracy	GPS: 5 m or less SBAS(GAGAN):2.0 m or less
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¹ Vendor should provide the exact dimensions of instrument in the tender.

² All software modules should be GUI based and should be supported by recent Microsoft windows operating system.

- Vendor should clearly indicate the licensing policy for each module.
- Vendor should provide all details, feature and modules of software.
- Vendor must provide all details of software along with the licensing policies.

³ Vendor should quote it separately.

Note:

- ✓ Vendor can additionally quote for any other proprietary software/hardware which can improve/maximize the performance/productivity in terms of data acquisition and processing providing its full detail.
- ✓ Vendor should provide all necessary manuals for each component/module of software and hardware.

Deliverable:

- The vendors should provide, without fail, the list of all the subsystems, disks, interfaces (cables/controller cards), other units, licenses, which are part the instrument.
- The vendors should also provide the details of the documentation that will be supplied along with the system.