

राष्ट्रीय केला अनुसंधान केन्द्र (भारतीय कृषि अनुसंधान परिषद) तोगामलै रोड, तायनुर पोस्ट, तिरुचिरापछ्लि. - ६२० १०२. तमिलनाडु

National Research Centre for Banana (Indian Council of Agricultural Research) Thogamalai Road, Thayanur P.O. Tiruchirapalli - 620 102, Tamil Nadu, India

F.No.25(1)/2015-SP/ 98-105

То

Dated: 24.05.2016

Sir/s,

Quotations are invited by the Director, NRC for Banana, Trichy, for the supply of the following items as per the specifications given below.

No.	Name of the article		Qty.
			Reqd.
	INFRA RED THERMOME	TER	1 No.
	Specification:		
	Thermal Imaging Camera wit	h minimum of the following specifications	
	Temperature range	: - 20 °C to 350 °C	
	Accuracy	: ±2 °C or 2 %	
	On-screen emissivity correcti	on : 0.1 to 1.0	W
	Detector type	: 120 X 90 Focal Plane Array,	
		uncooled Micro bolometer	
	Thermal sensitivity (NETD)	$: \le 0.05$ °C at 30 °C target temp	
	Infrared spectral band	: 7.5 μm to 14 μm (long wave)	
	Visual (visible light) camera		
	Thermal Imaging Camera must have with on-screen reflected background		
	temperature compensation and transmission correction. The thermal imaging		
		f IR & Visual Images and the rmal image must be	
	available in the center of the screen		1
	Display	: minimum of 3.5 inch	·
		(landscape) 320x240 LCD	
	Palettes	: Iron bow, Blue-Red, High- contrast,	
		Amber, Hot Metal Gray Scale	
	Level and span	: auto/manual -scaling	
	Storage medium	: Minimum of internal storage with 4 GB	
		and with option of micro SD clot with 4	
		GB.	
	Memory review	: must be available in thumbnail view	
	Batteries	: Lithium ion rechargeable batteries.	
		Batteries should have LED display to	
		show charge level	
	Battery life	: Minimum of four hours continuous use	
		per battery pack	
	Battery charge Timing	: < 3 hours to full charge with 220 V	

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Standard infrared lens

: 35.6 ° x 26.8 ° Field of view Spatial resolution (IFOV) : 5.2 m Rad Minimum focus distance : 0.45 m

: -10 °C to +50 °C & RH 10 % to 95 % Operating temperature & RH

non-condensing

IR lens must have international Safety standards

: Should meet all applicable requirements Electromagnetic compatibility in EN61326-1:2006C Tick IEC/EN 61326-1 US FCC CFR 47, Part 15 Class

: 0.03 g2/Hz (3.8 grms), IEC 68-2-6 Vibration

: 25 g, IEC 68-2-29 Shock : 2 meter (6.5 feet) Drop Weight (battery included) : Less than 0.78 kg

: IP54 (protected against dust, limited Enclosure rating

ingress: protection against water spray from all directions)

Full analysis and reporting software to be included with the supply.

Software must be license free and all upgrades for the software to be provided free of cost.

The Software shall have minimum of the following features

Complete Analysis of the Thermal Imager

Capability to add comments & remarks in the Image

3D IR Analysis of the Thermal Images

Generate Reports automatically Add visual images in the Reports

Other essential and optional accessories must be quoted: Thermal imager with standard infrared lens; ac power supply and battery pack charger (including mains adapters); one, rugged lithium ion battery packs; Software with free software upgrades for life; soft transport bag; printed user's manual; Standard target temp IR meter for soil temperature and atmospheric temperature probe.

MINIMUM FREE WARRANTY: TWO YEARS.

Necessary leaflet of the model quoted should be attached with the quotation, Note: failing which, the offer will be rejected.

- Quotations should be inclusive of all packing, forwarding, Insurance, freight etc. 1. Quotations exclusive of packing and freight charges etc. should indicate the amount that shall be charged on this account.
- Complete descriptions, specifications and make of the goods should be given in the 2. quotations. Necessary literature and pamphlets if any also be sent along with the quotation. Rate per unit should also be given precisely and delivery period clearly mentioned.
- THE FIRM SHOULD INVARIABLY QUOTE THE TIN, CST NO. ETC. ON 3. THE BODY OF THE LETTERHEAD IN WHICH THE QUOTATION IS SENT, IF NOT YOUR QUOTATION WILL BE REJECTED.
- The quotation should be F.O.R. destination and should be kept open for 180 days from 4. the date of quotations. Delivery at the Institute premises at NRCB Office Cum

Laboratory Building, Near Thayanur Santhai, Thogamalai Road, Tiruchirappalli-620102/NRCB Research Farm Podavur Village, Inampuliyur Post, Via-Kuzhumani, Tiruchirapalli -639 103 (Tamil Nadu) is preferable.

5. The quotations should be adessed in the name of "DIRECTOR, NATIONAL RESEARCH CENTRE FOR BANANA, Near Thayanur Santhai, Thayanur Post, Thogamalai Road, Tiruchirapalli - 620 102 (T.N.)", should reach on 08.06.2016 (WEDNESDAY) by 12.00PM, in a sealed cover super scribing "QUOTATIONS FOR THE SUPPLY OF INFRA RED THERMOMETER". FAILURE TO DO SO WOULD RESULT IN REJECTION OF QUOTATION.

The right to accept or to reject all or any of the quotation in part or full is reserved.

NOTE: You are requested to send your quotations through "SPEED POST" only and not through "Courier service".

145/20le ASSISTANT/ADMINISTRATIVE OFFICER

Yours faithfully,

Copy to:

1. Chairman (SPAC)

2. Member Secretary (SPAC)

3. The Chairman (PMEC) – for uploading in NRCB Website.

4. The Nodal Officer (CPPP) - for uploading in CPP Portal.

5. Pvt. Secry. to Director.