



Republic of the Philippines  
**VISAYAS STATE UNIVERSITY**  
Visca, Baybay City, Leyte

## PURCHASE REQUEST

PPMP No. : **PPMP-2025-101524-0778**

PR No.: **GF-2024-11-03137**

Date: **11-14-2024**

Dept./Office: **DFS**

Category: **Laboratory Equipment**

Section/End-User: **Eraie Jane P. Manzano**

Project Title/Code: **DFS- Capital Outlay-ICT and Technical and Scientific Equipment 2025**

Funding Source: **General Fund - CO**

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	<b>LI-2200C Plant Canopy Analyzer</b>	unit	1	950,000.00		950,000.00

### Specification:

#### Console (LAI-2270C)

- **Sensor Inputs:** Two 6-pin connectors for LAI-2250 Optical Sensors. 2 BNC connectors for LI-COR Light Sensors
- **Data Storage Capacity:** 128 MB of FAT16 memory
- **Keypad:** 22 button tactile response keypad
- **Display:** 128x64 graphics display
- **Communications:** USB (as mass storage device)
- **Global Positioning System (GPS RADIONOVA® RF Antenna Module):**
- **Clock:** Year, Month, Day, Hour, Minute. Accuracy of  $\pm 3$  minutes per month
- **Power Requirements:** 4 "AA" alkaline, NiMH, lithium batteries
- **Battery Life:**
- **Size:** 20.9 x 9.8 x 3.5 cm (8.2" x 3.9" x 1.4")
- **Weight:** 0.454 kg (1.0 lb) with batteries

#### Optical Sensor (LAI-2250)

- **Sensor Inputs:** One 6-pin Bulkhead connector for control unit interface
- **Memory:**
- **Keypad:** 2 button, tactile response keypad
- **Clock:** Year, Month, Day, Hour, Minute.  $\pm 3$  minutes per month. Can be synced with control unit clock when joined with a data cable
- **Power Requirements:** 2 "AA" (alkaline, NiMH, lithium) Batteries
- **Battery Life:** 180 hours of typical operation (based on 2 "AA" alkaline batteries)
- **Optics:** 1.00° maximum decentering error as measured from center of mass of ring 4. 0.50° maximum magnification error as measured from the center of mass of ring 4
- **Radiation Rejection:**
- **Wavelength Range:** 320-490 nm
- **Nominal Angular Coverage:**
- **Lens Coating:** MgF2 for improved transmission at oblique angles (external and internal lenses)
- **View Caps:** Provide azimuthal masking of view into quadrants of 10°, 45°, 90°, 180°, and 270°
- **Diffuser Cap:** Used to cover the lens when measuring sky radiation properties for scattering corrections
- **Size:** 63.8 L x 2.9 W x 2.9 D cm (25.1" x 1.125" x 1.125") (Endcap: 4.4 W x 5.1 D cm; 1.75" x 2.0")

- **Weight:** 0.845 kg (1.86lbs) with batteries

#### Environmental Conditions

- **Operating Temperature Range:** -20 to 50° C
- **Humidity Range:** 0 to 95% RH (non-condensing conditions)
- **Storage:** -40 to 65 °C

2	Light meter sensor quantum	unit	1	55,000.00		55,000.00
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#### Specification:

Absolute Calibration:  $\pm 5\%$  traceable to the U.S. National Institute of Standards and Technology (NIST)

Sensitivity: Typically 5  $\mu$ A to 10  $\mu$ A per 1,000  $\mu$ mol s<sup>-1</sup> m<sup>-2</sup> Linearity: Maximum deviation of 1% up to 10,000  $\mu$ mol s<sup>-1</sup> m<sup>-2</sup>

Stability:  $< \pm 2\%$  change over a 1 year period Response Time: Less than 1  $\mu$ s (2 m cable terminated into a 604 Ohm load)

Temperature Dependence:  $\pm 0.15\%$  per °C maximum

Cosine Correction: Cosine corrected up to 82° angle of incidence

Azimuth:  $< \pm 1\%$  error over 360° at a 45° elevation

Tilt: No error induced from orientation

Operating Temperature Range: -40 °C to 65 °C

Relative Humidity Range: 0% to 95% RH, Non-Condensing

Detector: High stability silicon photovoltaic detector (blue enhanced)

Sensor Housing: Weatherproof anodized aluminum body with acrylic diffuser and stainless steel hardware; O-ring seal on the sensor base

Size: 2.36 cm diameter x 3.63 cm (0.93" x 1.43")

Weight: 24 g head; 60 g base and cable (2 m) with screws

Cable Length: 2 m, 5 m, 15 m, 50 m (6.5', 16.4', 49.2', 164')

3	Wildlife Camera Lens-EF100-400mm f/4.5-5.6L IS II USM	unit	1	170,000.00		170,000.00
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#### Specification:

- **Focal Length:** 100 to 400mm
- **Maximum Aperture:** f/4.5 to 5.6
- **Lens Mount:** Canon EF
- **Lens Format Coverage:** Full-Frame
- **Focus Type:** Autofocus
- **Image Stabilization:** Yes
- **Filter Size:** 77 mm (Front)
- **Minimum Aperture:** f/32 to 38
- **Angle of View:** 24° to 6° 10'
- **Minimum Focus Distance:** 3.22' / 98 cm
- **Maximum Magnification:** 0.31x
- **Optical Design:** 21 Elements in 16 Groups

- **Diaphragm Blades:** 9, Rounded
- **Tripod Collar:** Removable and Rotating
- **Dimensions (ø x L):** 3.7 x 7.6" / 94 x 193 mm
- **Length at Maximum Extension:** 10.91" / 277.11 mm
- **Weight:** 3.61 lb / 1640 g

	TOTAL						1,175,000.00
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Purpose: For Laboratory use

Checked by:		Funds Available:	
 <b>GENESIS C. ALBARICO</b>		 <b>ALICIA M. FLORES</b>	
TWG - Laboratory Equipment		 <b>HEAD, BUDGET OFFICE</b>	
Signature:	Prepared by:	Noted by:	Approved by:
Printed Name:	 <b>ERAIE JANE P. MANZANO</b>	 <b>ANGELICA P. BALDOS</b>	 <b>PROSE IVY G. YEPES</b>
Designation:		UNIT HEAD, PROJECT LEADER	PRESIDENT, VSU