

BID NO. 335

The South Orange County Community College District is inviting vendors to submit bids for LASER TECHNOLOGY for Irvine Valley College, in accordance with the following Special Conditions and Instructions:

SPECIAL CONDITIONS & INSTRUCTIONS

1. Sales tax will be added at time of order.
2. Bidder is requested to insert unit price and extend totals in the space provided. Failure to comply may nullify bid.
3. Prices quoted must include all shipping/handling/fuel charges to the address and location designated.
4. Brand names mentioned are for illustrative or descriptive purposes only. If you propose to furnish another brand equal in quality & purpose, indicate make & model number proposed opposite each item. The specified brands must be furnished unless indicated by bidder.

Agilent Technologies part numbers are used in this Bid.

5. The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.
6. In the event that DISTRICT determines that any bid is unintelligible, illegible, or ambiguous, the DISTRICT may reject such bid as being nonresponsive.
7. **Bids are due by 2:00 PM on Monday, March 27, 2017.** Bids will be opened and publicly read in the Purchasing office located at 28000 Marguerite Pkwy, Health Science Bldg., 3rd Floor, Mission Viejo, CA 92692 on the date and time specified.
8. Late submittals will be returned to the firm without evaluation and firm will not qualify for consideration. It is the firm's responsibility to ensure submittals are received on or before the deadline and at the identified location. A postmark will not be accepted as meeting the delivery requirement. Third party carriers are routed through the warehouse and may experience delay from carriers stated delivery timeframe. Hand delivery should include time allowances for limited parking, the possibility of elevator failure (third floor delivery) or other potential obstacles to reaching the delivery location in a timely manner.

Mail or Hand Delivery of Bid to: SOCCCD - Purchasing Department
Health Science Bldg. 3rd Floor
28000 Marguerite Pkwy.
Mission Viejo, CA 92692
(949) 582-4680

SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT INSTRUCTIONS AND CONDITIONS

1. **BIDS:** All prices and quotations shall be typewritten or printed in ink. No erasures are permitted. Mistakes may be crossed out and corrections inserted adjacent to and shall be initialed in ink by the person signing the bid. Verify your bids before submission as they cannot be withdrawn, corrected, altered or signed after public opening. The Board of Trustees will not be responsible for errors or omissions on the part of the bidders in making up their bids. Bid on each item separately; prices must be stated in units specified hereon. Wherever practicable, prices quoted shall be net including all trade discounts. Both price and extensions must be shown. In case of a discrepancy between the unit price and the extension, the unit price will be considered correct.

Cash discounts of less than 45 days will be considered net. Cash discounts will be computed from the final date of accepted delivery of merchandise or the date of the receipt of invoices, whichever is the later. If test or inspection is necessary, discounts will be figured from date of approved test or inspection report. If corrections or replacements are required, cash discounts will be figured from the date of satisfactory delivery.

The vendor shall be responsible for delivery and shall pay all costs, including drayage, freight and packing, for delivery F.O.B. the District Warehouse. Each item shall be securely packed and clearly marked as to contents. All materials furnished must be assembled and ready for use, unless otherwise specified. All material furnished must be in conformity with specifications and will be subject to inspection and approval after delivery. All shipments shall be accompanied by a packing slip, and the District purchase order number shall appear on all cases and packages. The right is reserved to reject and return at the risk and expense of the vendor such portion of any shipment which may be defective or fail to comply with specifications, without invalidating the remainder of the order. If rejected, all such material will be held for disposition at the expense and risk of the vendor. Deliveries must be made within the time specified.

Bids shall remain open and valid and subject to acceptance any time within 90 days after the bid opening date unless otherwise stipulated. The District may issue a purchase order for an individual item or combination of items, whichever is to the best interest of the District; may reject any or all bids or any part of a bid; or may waive any informality in a bid.
2. **TAXES:** Unless otherwise specified, the prices quoted are **not** to include California State Sales or Use Tax.
3. **BRAND NAMES:** Brands as listed on the bid letter are given for descriptive purposes **ONLY** and are presumed to be followed by the words "OR EQUAL." The manufacturer's name and model number must be with your bid form. If bidding on brands or models other than specified, bidder must state on bid form the brand, number and description, and submit brochures or information complete enough to fully describe the alternate item. Bids submitted without complete descriptive information may be rejected. The District reserves the right to determine the acceptability of alternate items offered.
4. **SAMPLES:** Samples must be submitted upon request whenever bidding on other than item as specified. Samples, when required, must be furnished free of cost to the District, or item involved will be rejected unless otherwise specified in bid letter.

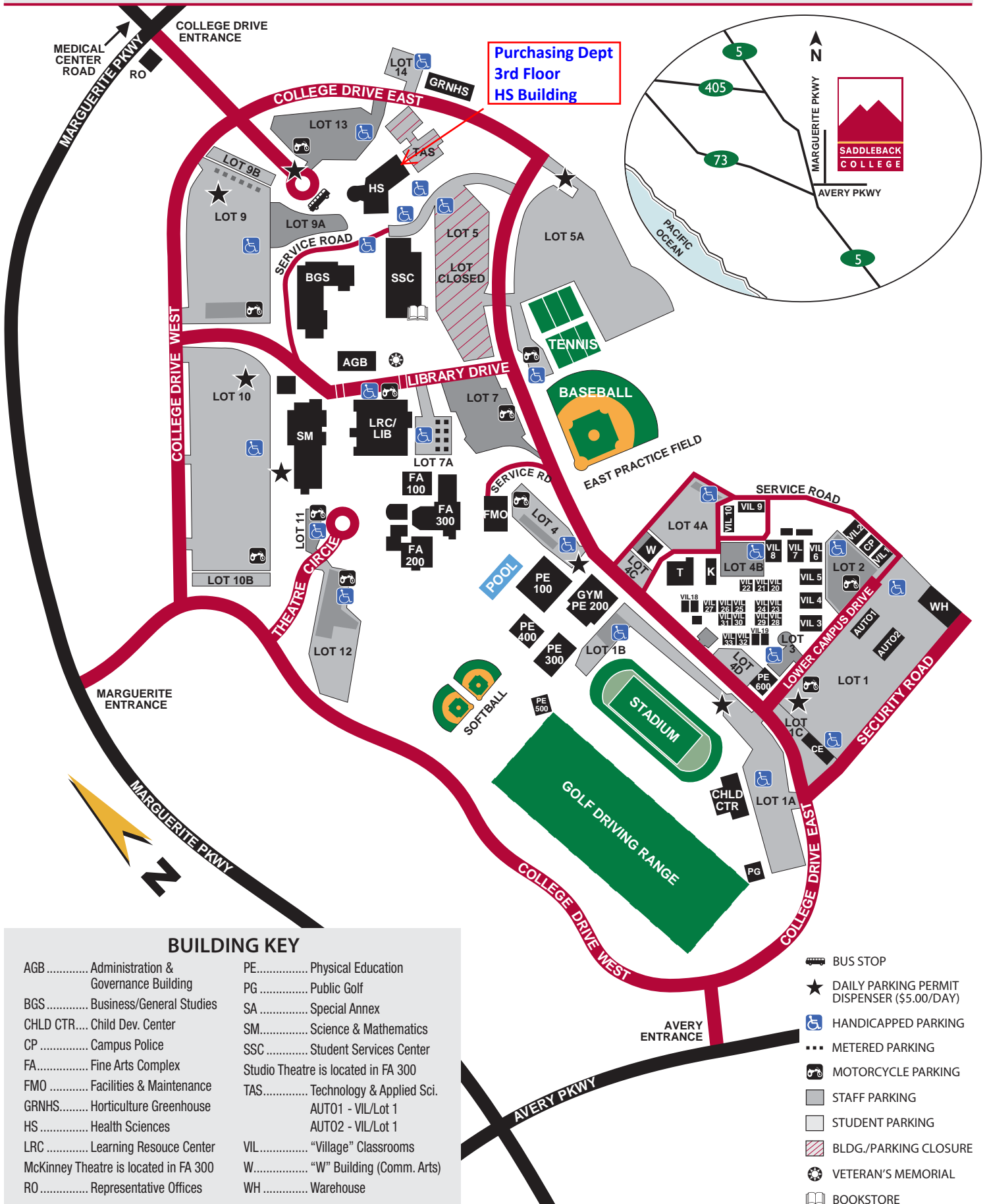
The District reserves the right to reject the bid of any bidder failing to submit samples as requested. Samples should be clearly marked with name of bidder, bid number, item number and description. The return of samples (if not destroyed in testing) shall be arranged by the bidder, at no cost to the District.

In all cases when a sample is taken from a shipment and sent to a laboratory for test, and the test shows that the sample does not comply with specifications, cost of test will be charged to the vendor.
5. **BID OPENINGS:** Each bid must be in **separate sealed envelope with bid identification on outside**, and must be submitted to the Purchasing Department, unless otherwise directed, of the South Orange County Community College District on the day and hour specified, at which time it will be publicly opened and read. Any bids received after scheduled time of opening will be returned unopened to the bidder.

The right is reserved to reject any or all bids, to accept any one or more items of a bid, to decrease quantities or to delete items entirely, or to award items separately or in any combination; or to waive any irregularities or informalities in the bids or in the bidding, whichever is in the best interests of the District.
6. **WHEN APPLICABLE**, items shall conform to all local, state, and Federal Safety codes, including U.S. Department of Labor, Division of Occupational Safety and Health Administration; California Occupational Safety and Health Administration; Underwriter Laboratories; Good Housekeeping Seal of Approval, etc.
7. **INVOICES AND PAYMENT:** Invoices shall be submitted in duplicate under the same firm name as shown on the purchase order and must be itemized showing quantity, unit price and total for each different type of supplies, material or labor. The District shall make payment for materials, supplies or services furnished under the purchase order within a reasonable and proper time after acceptance thereof and approval of the invoices by the authorized District representative.
8. **HOLD HARMLESS CLAUSE:** The vendor shall hold harmless and indemnify the District and Board of Trustees, its officers, agents, servants and employees from liability which may be made by reason of:
 - a. Any injury to person or property sustained by the vendor or by any person, firm, or corporation employed directly or indirectly by him upon or in connection with his performance under the purchase order, however caused.
 - b. Any injury to person or property sustained by any person, firm, or corporation, caused by any act, neglect, default, or omission of the vendor of any person, firm, or corporation, directly or indirectly employed by him upon or in connection with his performance under the purchase order.
 - c. Any liability that may arise from the furnishing or use of any copyrighted or uncopyrighted composition, secret process, or patented or unpatented invention, under the purchase order.
9. **DEFAULT BY VENDOR:** If the vendor fails or neglects to furnish or deliver any of the materials, supplies or services at the prices stated and in accordance with the terms and conditions of the bid and purchase order, the District may cancel the entire purchase order or any items affected by such default, may procure the articles or services from other services at the prevailing market price and may deduct from any unpaid balance due the vendor or collect against his bond or security any and all units quoted including expense incurred in purchasing prices paid by the vendor and/or delivery. The prices paid by the District at the time such purchases are made shall be considered the prevailing market prices.
10. **MINIMUM WAGE:** For all public works contracts, Contractor shall comply with the provisions of the Labor Code of the State of California pertaining to labor and the Prevailing Wage Scale. These rates are on file in the Purchasing Office of the District. Copies may be obtained on request.
11. **ANTIDISCRIMINATION:** It is the policy of the South Orange County Community College District Board of Trustees that in connection with all work performed under Construction and Purchasing Contracts, there be no discrimination against any employee engaged in the work because of race, color, ancestry, sex, national origin, or religious creed, and therefore the vendor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment and Housing Act, Government Code 12900, et seq. In addition, the vendor agrees to require like compliance by all subcontractors employed on the work by him.
12. **STATE AUDIT:** Pursuant to and in accordance with Section 8546.7 of the California Government Code, in the event that this Contract involves expenditures and/or potential expenditures of State funds aggregating in excess of Ten thousand dollars (\$10,000), the parties agree that all books, records and files shall be subject to the examination and audit of the Auditor General of the State of California for a period of three (3) years after final payment under this Contract. This provision shall apply to all grants, assignments, leases and subcontracts, if any, hereunder.
13. **WITHHOLDING OF PAYMENTS:** The District shall permit the substitution of securities for any monies withheld by the District to ensure performance under a contract. All substitutions shall be in accordance with Public Contract Code Section 22300.
14. Awards will be made subject to the approval by the Board of Trustees.

SADDLEBACK COLLEGE CAMPUS MAP

28000 Marguerite Parkway, Mission Viejo, CA 92692 • 949.582.4500



South Orange County Community College District

Purchasing Department
 Attn: Barbara Bangs
 28000 Marguerite Parkway
 Mission Viejo, CA 92692

Tel: (949) 582-4377 Email: Bbangs@socccd.edu

Req# RQ009668

Due Date: March 27, 2017

Bid #335

Item	Qty	Unit	Item	Brand	Unit Cost	Extension
1	1	Each	#G6873AA Spectrophotometer Cary 7000 UMS With the following configuration: Provide for automated, unattended, measurement of absolute reflection and transmission, at user definable			
2	1	Each	#G6874A Calibration Standards UMA Options for sample handling, system validation and sample holder alignment. Fused silica plate supplied as standard. With the following configuration: Ship-to Country: USA Add Cube Beam Splitter Holder Add Edge Mount Sample Holder Add Round Sample Holder Add Specular, R, Std, 7 deg, NIST Cert. *Additional specifications attached			
					Sub-Total	
					Sales Tax	
					Shipping	
					Terms	
					Total Cost	

Vendor agrees to ship _____ calendar days from receipt of order

Contact phone number _____

Contact email address _____

Contact name _____

Signature _____ Date _____

BID NO.: _____

Due Date: _____

Due Time: _____

Company Name _____

Fax No. _____

**Bid No. 335
Laser Technology
Irvine Valley College**

ADDITIONAL SPECIFICATIONS

Monochromator	Double out-of-plane Littrow monochromator
Grating	70 x 45 mm
UV-Vis	Ruled line diffraction grating, 1200 lines/mm blazed at 250 nm
NIR	Ruled line diffraction grating, 300 lines/mm blazed at 1192 nm
Beam splitting system	Rotating beam splitter, which measures a sample, dark and reference signal per cycle with a speed of 30 Hz
Detectors	
UV-Vis	R928 PMT
NIR	Cooled PbSmart PbS
Limiting resolution (nm)	
UV-Vis	<0.048 nm
NIR	<0.2 nm
Stray light (%T)	
At 220 nm (10 g/L NaI ASTM method)	<0.00007%
At 370 nm (50 mg/L NaNO ₂)	<0.00007%
At 1420 nm (H ₂ O, 1 cm pathlength)	<0.0002%
At 2365 nm (CHCl ₃ , 1 cm pathlength)	<0.00045%
Wavelength range (nm) (N ₂ purge required below 185 nm)	175–3300 nm
Wavelength accuracy (nm) Deuterium lamp lines	
UV-Vis: 190–900 nm	± 0.08 nm
NIR: 760–3000 nm	± 0.4 nm
Wavelength reproducibility (nm)	
Peak separation of repetitive scanning of a UV-Vis line source	<0.025 nm
Peak separation of repetitive scanning of a IR line source	<0.1 nm
Standard deviation of 10 measurements, UV-Vis	<0.005 nm
Standard deviation of 10 measurements, NIR	<0.02 nm
Photometric accuracy (Abs)	
Using double aperture method at 0.3 Abs UV-Vis	<0.00025 Abs

Photometric linearity (Abs)

All tests performed by addition of filters technique UV-Vis (465 nm, 10 s SAT, 2 nm SBW), NIR (1200 nm, 10 s SAT, energy 3)

UV-Vis, at 1 Abs	<0.0007 Abs
UV-Vis, at 2 Abs	<0.0014 Abs
UV-Vis, at 3 Abs	<0.005 Abs
NIR, at 1 Abs	<0.0015 Abs
NIR, at 2 Abs	<0.007 Abs

Photometric range (Abs)

10 Abs

Photometric reproducibility (Abs)

Using NIST 930D filters, at 546.1 nm, 2 s SAT, 2 nm SBW

0.5 Abs, Standard deviation for 10 measurements	<0.00008
1.0 Abs, Standard deviation for 10 measurements	<0.00014

Photometric stability (Abs/hour)

<0.00018

After 2 hr warm up, 500 nm, 1 s SAT, 2 nm SBW

Photometric noise (Abs/RMS)

UV-Vis (190 nm, 1 s SAT, 2 nm SBW)

At 0 Abs	<0.00009
At 1 Abs	<0.0002

UV-Vis (500 nm, 1 s SAT, 2 nm SBW)

At 0 Abs	<0.00003
At 1 Abs	<0.00005
At 2 Abs	<0.0001
At 3 Abs with 1.5 Abs RBA	<0.0003
At 4 Abs with 1.5 Abs RBA	<0.0008
At 5 Abs with 1.5 Abs RBA	<0.002
At 6 Abs with 3.0 Abs RBA	<0.0045

NIR: Fixed SBW

(1500 nm, 1 s SAT, 2 nm SBW)

At 0 Abs	<0.00003
At 1 Abs	<0.0001
At 2 Abs	<0.0005
At 3 Abs	<0.007

NIR: Variable SBW

(1500 nm, 1 s SAT, Energy 1)

At 0 Abs	<0.00004
At 2 Abs	<0.0005
At 3 Abs with 1.5 Abs RBA	<0.0003

Baseline flatness (Abs)	
UV-Vis (0.1 s SAT, 4 nm SBW), NIR (0.2 s SAT, Energy 1), baseline corrected	± 0.0012 (200 to 3000 nm)
UV-Vis (0.2 s SAT, 2 nm SBW), NIR (0.24 s SAT, Energy 1), no smoothing applied	± 0.0007 (200 to 3000 nm)
Sample compartment beam separation (mm)	190.5 mm
Compartment size (width x depth x height) Extended sample compartment fitted	160 x 433 x 221 mm
Access	Top, front and base
Instrument dimensions (width x depth x height)	1020 x 710 x 378 mm
Purging	
Sample compartment	Yes
Optics	Yes
Instrument weight	91 kg

Operational

Spectral bandwidth (nm)*	
UV-Vis	0.01–5.00 nm, 0.01 nm steps
NIR	0.04–20 nm
* At optimum environmental conditions. See page 5 for details.	
Signal averaging (seconds)	0.033–999 s
Maximum scan rate (nm/min)	
UV-Vis	2000 nm/min
NIR	8000 nm/min
Slew rate (changing between wavelengths, nm/min)	
UV-Vis	16000 nm/min
NIR	64000 nm/min
Data interval (UV-Vis)	
(nm)	0.005–1.111 nm
cm ⁻¹ *	1.627–17.335 cm ⁻¹ *
Å	0.05–11.1 Å
Data interval (NIR)	
(nm)	0.02–4.444 nm
cm ⁻¹ *	0.3145–4.0753 cm ⁻¹ *
Å	0.2–44.44 Å
* Interval range is dependent upon scan range	
Repetitive scanning	
Maximum number of cycles	999
Maximum cycle time (min)	9999

Measurement Modes	<ul style="list-style-type: none"> • Absolute specular reflection at variable angle from 5 to 85 degrees in 0.02 degree intervals • Direct transmission and variable angle transmission from 0 to 180 degrees in 0.02 degree intervals • Diffuse scattering, reflection or transmission through independent sample rotation (360 degrees) and detector positioning (10 – 350 degrees) at 0.02 degree intervals • Absorptance, A where $A = 1 - R - T$ at variable angle without moving the sample or beam onto the sample for improved productivity and greater accuracy • Reflection/Transmission at single wavelength (read) or wavelength range (scan)
Wavelength Range	190 – 2800 nm
Auto Polarizer Wavelength Range	250 – 2500 nm
Detectors	Two-colored Si/InGaAs
Aperture Masks	Incident beam: 1, 2 and 3 degrees Detector: 1, 1.8, 2, 3, 4, 4.4, 5 and 6 degrees

Recommended environmental conditions

Instrument storage	5–45 °C at 20–80% relative humidity, non-condensing, altitude < 2133 m
Instrument operation*	Below 853 m altitude: 10–35 °C, 15–80% relative humidity, non-condensing Between 853 and 2133 m altitude: 10–25 °C, 15–80% relative humidity, non-condensing
Instrument electrical requirements	Mains supply of 100–240 volts AC with 300 VA power consumption. Frequency 50-60 Hz

* For optimum analytical performance, it is recommended that the ambient temperature of the laboratory be between 20 and 25 °C (68 and 77 °F) and be held constant to within ± 2 °C (± 3.6 °F) throughout the entire working day. When performing the limiting resolution test on the Cary 4000/5000/6000i/7000 systems it is a requirement that these environment conditions are met.

Accessories

The Agilent Cary 7000 UMS is compatible with a wide range of sample compartment accessories when the UMA is removed. Some major accessories include:

Cary 7000 UMS Accessories	<ul style="list-style-type: none"> • Diffuse Reflectance Accessory (DRA) – Internal (110mm sphere) and External (150mm sphere) • Fixed angle Specular Reflectance Accessories (SRA) • Variable Angle Specular Reflectance Accessory (VASRA) • Polarizers – Glan Taylor, Glan Thompson and Wire Grid • Variable angle transmission holder • Automated thin film holder • Peltier temperature software controlled single and multi-cell cuvette holders
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Support policies

Type	Policy
Warranty	12 months, though this may vary according to location
Hardware support period	Seven (7) years from date of last unit manufacture. After this time, parts and supplies will be provided if available
Software support	Telediagnostic capability is available for some instrument models. Availability of Telediagnostic support may vary according to location. Software upgrades to add additional functionality will attract a fee

Additional Features Required:

- Ability to move the detector and the sample, independently of each other, providing a true multi-modal measurement system capable of absolute reflectance, transmission and scattering without moving the sample.
- Superior stray light rejection with an unprecedented 10 Abs photometric range.
- Four detectors consisting of a high performance photomultiplier tube (PMT), proprietary PbS detector and a two-colored Si/InGaAs detector.
- "Direct View" two-colored Si/InGaAs detector that provides coverage in the UV-Vis and NIR range without using integrating spheres or light pipes that attenuate signal and can compromise data quality.
- Proprietary PbSmart technology detector that provides superior photometric linearity in the NIR up to 8 Abs.
- High resolution optical encoder technology that ensures the sample and detector never loses position during data collection – even if the system is bumped accidentally.
- Wire grid polarizers that provide superior throughput across the wavelength range, and a large acceptance angle to ensure a high degree of polarization accuracy.
- Plug-n-play installation and removal of the UMA – with no re-alignment required – enabling use of the Cary 7000 spectrophotometer with other accessories via its precision Lock Down mechanism for quick and reproducible accessory changeovers.