## **Order Form for Atmosphere Monitoring Instruments**

## Purchase orders and payments should be sent to:

Institute for Earth Science Research and Education 2686 Overhill Drive Eagleville, PA 19403-4822 USA

IESRE is a tax-exempt 501(c)(3) organization. Orders can be made by mail or email to David Brooks at <a href="mailto:brooksdr@instesre.org">brooksdr@instesre.org</a>. Institutional purchase orders are acceptable. IESRE does not accept credit cards. Payment can be made by check or money order payable to <a href="mailto:Institute for Earth Science Research and Education">Institute for Earth Science Research and Education</a>, or by PayPal to brooksdr@instesre.org. (Although we are not allowed to require payment of a PayPal transaction charge, we would appreciate it if you can add 3% or a minimum of \$1.50 to your order total to cover our PayPal processing charges.) Payments for large orders or orders from other countries can be made with an electronic bank transfer – account information and fees are available on request. For questions, contact: <a href="mailto:brooksdr@instesre.org">brooksdr@instesre.org</a>, 610-584-5619.

| Order Date: Purchase O                | rder Identification (optional): |  |
|---------------------------------------|---------------------------------|--|
| Ordered by:                           |                                 |  |
| Name:                                 | Email:                          |  |
| Address 1:                            |                                 |  |
| Address 2:                            |                                 |  |
| Address 3:                            |                                 |  |
| Address 4:                            | City:                           |  |
| State/Province:                       | Country:                        |  |
| Postal Code:                          | Phone/Fax:                      |  |
|                                       |                                 |  |
| Shipping address if different from "O | rdered by" address:             |  |
| Name:                                 | Email:                          |  |
| Address 1:                            |                                 |  |
| Address 2:                            |                                 |  |
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| Address 4:                            | City:                           |  |
| State/Province:                       | Country:                        |  |
| Postal Code:                          | Phone/Fax:                      |  |

## Items:

Pyranometers measure broadband solar radiation reaching Earth's surface. Radiation on a horizontal surface is called insolation. IESRE pyranometers use a blue-enhanced silicon photodiode detector. Assembled kits must be calibrated against a reliable reference. Reflectometers consisting of two pyranometers are used to measure surface reflectivity with one instrument pointing up and the other pointed down. Reflectometers built from kits don't need an absolute radiometric calibration but one instrument needs to be calibrated relative to the other. For shipping options for non-U.S. addresses, contact brooksdr@instesre.org.

|   | Unit Price   | How Many?                             | Subtotal                                  |  |
|---|--|---------------------------------------|---|--|
| Item 1. Kit of parts for pyranometer.   | \$30 each; \$29, 5-9 kits;   |                                       | <b>.</b>                                  |  |
|   | \$28, 10 or more kits  |                                       | \$  |  |
| Kits are provided with a 6' (2m) "bare" cable for   | connecting to a data logg  | er. Optionally, th                    | ey can be                                 |  |
| provided with a 2.5mm stereo cable as required  | for use with HOBO data lo  | ggers from Onse                       | et Computer                               |  |
| Corporation – see Item 8. Includes shipping to U.   | S. address.  |                                       |   |  |
| Item 2. Assembled and calibrated  | \$80 each; \$79, 5-9;  |                                       | ÷   |  |
| pyranometer.  | \$78, 10 or more   |                                       | \$  |  |
| Assembled pyranometers are calibrated against   | a Kipp & Zonen SP-Lite py  | ranometer. They                       | come with                                 |  |
| a 6' (2m) "bare" cable for connecting to a data lo  | ogger. Optionally, they car  | be provided wit                       | th a 2.5mm                                |  |
| stereo cable as required for use with HOBO data   | loggers from Onset Comp  | uter Corporation                      | ı see Item                                |  |
| 8. Includes shipping to U.S. address.   |  |                                       |   |  |
| Item 3. One-channel reflectometer kit.  | \$60 each; \$59, 5-9 kits;   |                                       | <u> </u>                                  |  |
|   | \$58, 10 or more kits  |                                       | \$  |  |
| The kit consists of two pyranometer kits, with sa   | me cable options. Includes   | shipping to U.S.                      | address.                                  |  |
| Item 4. Two-channel reflectometer kit.  | \$80 each; \$59, 5-9 kits;   |                                       | 4   |  |
|   | \$78, 10 or more kits  |                                       | \$  |  |
| receives only near-IR radiation. Cable options are shipping to U.S. address.  Item 5. One-channel reflectometer kit, assembled and tested.  | \$90 each; \$88, 5-9;<br>\$85, 10 or more  | anometers. Inclu                      | \$  |  |
| Item 6. Two-channel reflectometer kit, assembled and tested.  | \$120 each; \$118, 5-9;<br>\$115, 10 or more   |                                       | \$  |  |
| The two instruments must be calibrated side-by-side, one relative to the other.   |  |                                       |   |  |
| The two instruments must be calibrated side-by-   | side, one relative to the ot   | her.                                  | Υ   |  |
| Item 7. Calibration of pyranometer or VIS channel of one- or two-channel reflectometer unit.  | \$35; \$30 each, more than 1   | her.                                  | \$  |  |
| Item 7. Calibration of pyranometer or VIS channel of one- or two-channel reflectometer unit.  Calibration service for an assembled kit, using a channel reflectometer, only the VIS channel of the The price includes return shipping to U.S. address.  | \$35; \$30 each, more<br>than 1<br>Kipp & Zonen SP-Lite pyrai<br>te upward-facing unit will<br>s for calibrated instrument | nometer. For a o<br>benefit from this | \$<br>ne- or two-<br>s calibration        |  |
| Item 7. Calibration of pyranometer or VIS channel of one- or two-channel reflectometer unit.  Calibration service for an assembled kit, using a channel reflectometer, only the VIS channel of the The price includes return shipping to U.S. address Item 8. 6' (2-m) 2.5mm stereo cable for HOBO data loggers from Onset Computer Corporation.                                  | \$35; \$30 each, more<br>than 1<br>Kipp & Zonen SP-Lite pyran<br>ee upward-facing unit will                                | nometer. For a o<br>benefit from this | \$<br>ne- or two-                         |  |
| Item 7. Calibration of pyranometer or VIS channel of one- or two-channel reflectometer unit.  Calibration service for an assembled kit, using a channel reflectometer, only the VIS channel of the The price includes return shipping to U.S. address Item 8. 6' (2-m) 2.5mm stereo cable for HOBO data loggers from Onset Computer   | \$35; \$30 each, more<br>than 1<br>Kipp & Zonen SP-Lite pyrai<br>te upward-facing unit will<br>s for calibrated instrument | nometer. For a o<br>benefit from this | \$<br>ne- or two-<br>s calibration        |  |
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Payment method: Check #\_\_\_\_\_ PayPal date \_\_\_\_\_ Purchase Order #\_\_\_\_ (PayPal to brooksdr@instesre.org, Check or Purchase Order to Institute for Earth Science Research and Education)