SPECTROLINE®

AccuMAX™ XRP-3000
Advanced Digital Radiometer/Photometer

Single detector with dual sensors measures __both__ ultraviolet and visible light. Complies with MIL and ASTM specifications for MPI and FPI.

Specially Engineered for NDT Applications

Features

- Microprocessor-controlled readout unit with dual-wavelength sensor detector
- Superior bandpass interference filter
- Choice of direct or USB connection between sensor detector and readout unit
- Excellent cosine response
- User-defined power save and automatic shutoff
- Large, easy-to-read LCD screen
- Sealed sensor housing and USB connection with water-resistant adapter

Accurate

The **AccuMAX™ XRP-3000** radiometer/photometer kit uses a dual-wavelength UV-A/VIS sensor detector to measure both ultraviolet and visible light. Featuring automatic zeroing, integration and signal hold, the unit provides accurate readouts for UV, visible irradiance or radiance. The LCD readout features ±0.2% linearity with the sensor sending the linearity correction data to the readout unit during initial power up. To ensure consistent results, sensors are designed with superior bandpass filters while optical stacks are assembled in Class 100 clean workstations. For precise spectral coverage, high-quality interference filters are used to resist degradation.

Durable

The rugged meter housing features a removable, rubber protective boot for better grip and to help prevent accidental breakage. It also provides superior protection against moisture contamination, shock and humidity. In addition, the **XRP-3000** features a liquid- and water-resistant, sealed sensor housing with a special self-sealing ring to help eliminate light leakage.

Simple Operation

The **XRP-3000** meter's microprocessor is the heart of its simplicity. Just four pressure-sensitive buttons on the readout unit's membrane keypad offer an extensive array of advanced functions. For example, to subtract ambient light, the user need only press the "ZERO" button. This activates autozeroing, sets the value to 0 and displays relative readings of subsequent measurements. "HOLD" freezes the display thus obtained, while "INTG" displays the average UV intensity after incorporating the UV energy over time. These functions and other user-selectable parameters are easily accessible through the software's main and sub menus.
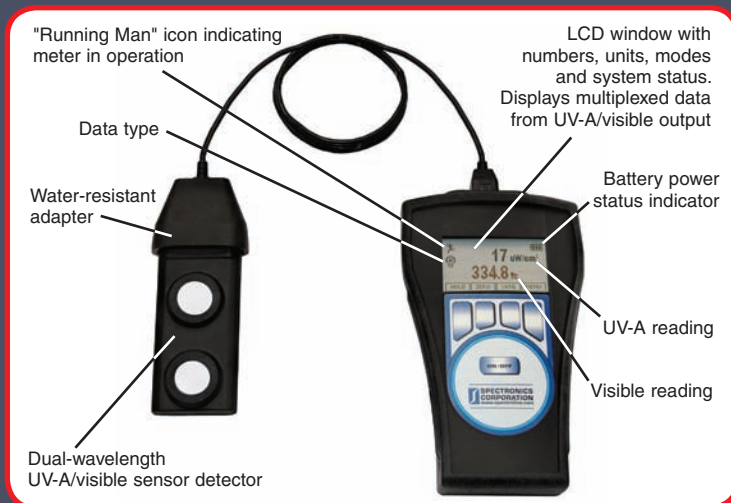
Reliable

The **XRP-3000** radiometer is carefully quality-controlled to ensure that each unit has up-to-date calibration and meets stringent measurement requirements. Housed in a durable polycarbonate case, it features dependable solid-state electro-optical circuitry for long, trouble-free operation.

Portable

The **XRP-3000** is compact, lightweight and battery-operated for convenient use in the factory, field or any other location where measurements need to be taken. A slide-out panel allows for easy replacement of the unit's 9-volt batteries.

Versatile

The **XRP-3000** offers extreme flexibility in the workplace. For technicians performing radiographic examination, the XS-555/L *luminance sensor* is available as an accessory to provide film viewer output measurements in cd/m².

"Running Man" icon indicating meter in operation

Data type

Water-resistant adapter

Dual-wavelength UV-A/visible sensor detector

LCD window with numbers, units, modes and system status. Displays multiplexed data from UV-A/visible output

Battery power status indicator

UV-A reading

Visible reading

AccuMAX™ XRP-3000 Specifications

Readout Unit (XR-1000)

Resolution	4-digit autoranging display
Screen	128 x 64 dot pixel chip on glass STN transmissive monochrome LCD—2.8 in (7.1 cm) diagonal illuminated (backlit)
Sampling Rate	7.5 Hz (single sensor) 15 Hz (dual sensor)
Read Update	2 Hz
Overall Accuracy	Better than ±5% with reference to NIST standards
Temperature Coefficient	±0.025%/°C (0 to 50°C)

Dual UV-A/Visible Sensor Detector (XDS-1000)

Irradiance Range
- **UV-A Sensor**   0–100 mW/cm²
- **Visible Sensor**   0–5,300 lux (0-500 fc)

Power Requirements

Battery Operation	Two non-rechargeable 9V alkaline battery cells are included as standard

Dimensions

Readout Unit
- **Length**   7.75 in (19.7 cm)
- **Width**   4.25 in (10.8 cm)
- **Thickness**   1.25 in (3.2 cm)
- **Weight**   0.8 lb (360 g)

Sensor Detector
- **Length**   4.75 in (12.1 cm)
- **Width**   2.0 in (5.1 cm)
- **Thickness**   7/8 in (2.2 cm)
- **Weight**   0.22 lb (100 g)

USB Cable   5 ft (1.5 m)

Kit Includes:
- **Water-resistant USB cable with adapter**   XCB-100
- **Rubber boot**   XRB-100
- **Carrying case**   XCC-100

Distributed By:

SPECTRONICS CORPORATION

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AccuMAX™ XS-555/L Luminance Sensor Detector

The perfect accessory for the AccuMAX XRP-3000 Digital Radiometer/Photometer Kit. Ideal for technicians performing radiographic examinations.

Luminance is typically used to measure uniformly radiating surfaces, such as backlit panels, film viewers and monitors. The AccuMAX XS-555/L luminance sensor detector measures the brightness of a visible light source and, unlike many competitive units, allows the user the choice of displaying the results in three distinct units of measure: candelas per square meter (cd/m^2), candelas per square foot (cd/ft^2) and footlamberts (fL).

Features

- Meets ASTM and MIL standards.
- Extremely versatile. Provides luminance measurements in cd/m^2, cd/ft^2 and fL.
- Ideal for radiographic examinations requiring film viewer output measurements.
- Connects easily to the digital readout unit via a USB cable.

Specifications

Dimensions

Height	3.2 in (8.1 cm)
Length	3.0 in (7.6 cm)
Width	2.1 in (5.3 cm)
Weight	6.4 oz (181g)

Luminance Range

0-1,000,000 cd/m^2
0-90,000 cd/ft^2
0-285,000 fL

Sensor detector connects easily to readout unit using any standard USB cable (left) or the Spectroline XCB-100 water-resistant sensor adapter cable (right).

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