

OmniCure®

OmniCure® R2000^{Plus} Radiometer

- Maintain process control and save setup time by calibrating multiple OmniCure S2000 Series systems with a preferred irradiance set point
- Achieve accurate wideband optical measurements with proprietary OmniCure detector technology
- Virtually eliminate beam profile dependence and significantly improve measurement accuracy through the proprietary OmniCure optical interface
- Support statistical process control through access to calibration data stored on the R2000^{Plus} unit and PC Control Software


excelitas®

TRUSTED ACCURACY, MODERN CONNECTIVITY, SIMPLIFIED UV PROCESS CONTROL WITH PROVEN R2000 RADIOMETER'S PERFORMANCE.

Accurate radiometry is essential for achieving consistent, repeatable UV curing results. The **OmniCure® R2000^{Plus} UV/Visible Radiometer** combines the proven measurement performance of the industry-trusted R2000 with a refined user experience designed for today's manufacturing environments. Featuring a large backlit display, intuitive graphical interface, USB-C connectivity, rechargeable battery technology, and enhanced process control capabilities, the R2000^{Plus} enables users to measure, verify, and optimize UV curing processes with confidence and ease.

The portable OmniCure R2000^{Plus} can be combined with the OmniCure S2000 Elite and S2000 curing systems to provide a complete curing station with unmatched control and repeatability.

Expanding Your Options



PROXIMITY ADAPTER

The proximity adapter allows the user to obtain accurate application specific power or irradiance measurements in flood geometry. Measurements are done by placing the emitting end of the light directly over the top of the proximity adapter, inserted into the OmniCure R2000^{Plus} Radiometer.



LAMP OUTPUT ADAPTER

The lamp output adapter is a rigid adapter that interfaces the curing unit and light source to allow direct measurements of the lamp power. This optical accessory is very important for system maintenance as it can be used to determine if the Light Guide requires replacement due to degradation.



CURING RING DETECTOR

When used in conjunction with the OmniCure R2000^{Plus} Radiometer, the Cure Ring Detector measures output power from the Cure Ring directly at the cure site, ensuring a highly repeatable process.



CURE SITE DETECTOR

When used in combination with the OmniCure R2000^{Plus} Radiometer, the Cure Site Detector measures output power of a Light Guide or optical accessory directly at the cure site. This provides accurate data for energy calculations, enabling the user to control the curing process more accurately.



Trusted R2000 Measurement Performance

The R2000^{Plus} preserves the proven non-imaging optical interface and flat-response detector technology used in the R2000, ensuring measurement equivalency and a seamless transition for existing users. This allows manufacturers to maintain process consistency and minimize requalification effort when upgrading to the R2000^{Plus}.

Broadband Measurement Capability (250 - 1000 nm)

Designed to accurately measure both UV and visible light, the R2000^{Plus} supports a wide range of curing applications and light source configurations. The broadband response provides versatile, reliable measurements across multiple processes.

Large Backlit Graphical Display

The high-visibility backlit display presents measurements, system status, settings, and calibration information in an easy-to-read format. This improves usability, reduces operator errors, and simplifies day-to-day operation.

Intuitive Graphical User Interface

A modern menu-driven user interface enables quick navigation of settings, measurements, calibration functions, and data logs. Users can access critical information efficiently, reducing setup time and training requirements.

One-Button Calibration

The R2000^{Plus} streamlines calibration of compatible OmniCure S2000 and S2000 Elite systems through a simple one-button process. This helps reduce downtime and ensures consistent curing performance across multiple systems.

USB-C Connectivity and Charging

Dual USB-C ports provide modern communication and charging capabilities. Users can easily connect to a PC for data transfer and advanced controls while also benefiting from convenient charging using industry-standard USB power sources.

Integrated Data Logging

Measurement readings and calibration data can be stored and reviewed directly on the radiometer. This provides users with quick access to historical information for troubleshooting, process verification, quality documentation, and statistical process control.

Supervisor Mode and User Lockouts

Supervisor Mode enables administrators exclusive ability to change and lock critical settings such as measurement mode, setpoints, external sensor selection, and data storage functions. This helps support SOP compliance, improve process control, and prevents unintended changes in routine operation.

Automatic Light Guide Detection

The R2000^{Plus} automatically detects standard light guide sizes and supports custom adapters, simplifying setup while ensuring accurate irradiance calculations. This reduces operator intervention and improves measurement repeatability.

NIST-Traceable Accuracy

With NIST-traceable calibration and auto-ranging operation, the R2000^{Plus} delivers highly accurate and repeatable measurements that support quality assurance requirements in production environments.

TECHNICAL SPECIFICATIONS

Feature	Specification
Wavelength Range	250 nm - 1 μ m (with suitable calibration)
Maximum Range	Power: 10 mW - 12W Irradiance: 5 mW/cm ² - 60 W/cm ²
Resolution	0.01 mW to 0.1W depending on measurement range
Accuracy	$\pm$ 5% maximum, $\pm$ 0.200 W/cm ²
Auto-ranging	Automatic range selection for both Power and Irradiance measurements to maximize displayed resolution and precision
Battery	Rechargeable Li-ion Battery
Functions	Power Measurement, Irradiance Measurement, Relative Mode, Absolute Mode, One-Button S-Series Calibration, Data Logging, Supervisor Mode, Automatic Light Guide Detection, External Sensor Support, USB-C & RS-232 Communication, Firmware Upgrade Capability
Spectral Range	300-600 nm
Calibration Range	320-500 nm
Dynamic Range	83 mW to 2.5W
Calibration	Traceable to the SI units of Irradiance
Connectivity	USB-C, RS-232, Mini-DIN External Sensor Port
Certifications	CE marked: complies with IEC, Canadian and US Standards, RoHS compliant

GERNERAL SPECIFICATIONS

Feature	Specification
Dimensions (L x W x H)	7.75 x 4.5 x 2.5 in (197 x 114 x 64 mm)
Weight	1.32 lb (600 g)
Warranty	1 year





2545 Railroad Street, Suite 300
Pittsburgh, PA 15222
United States

excelitas.com
omnicure@excelitas.com

For a complete listing of our global offices, visit www.excelitas.com/locations

© 2026 Excelitas Technologies Corp. OmniCure® is a registered trademark of Excelitas Technologies Corp. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks are the property of their respective owners, and neither Excelitas Technologies Corp., its affiliates or subsidiaries, or any of their respective products, are endorsed or sponsored by or affiliated in any way whatsoever with those organizations whose trademarks and/or logos may be mentioned herein for reference purposes. Excelitas Technologies Corp. reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.

OmniCure R2000^{Plus} Radiometer Product Brochure_2026.09

