



Innovative Photonics

KEY FEATURES

- 150W Halogen Lightsource
- *Light-Lock™* Light Feedback
- *Internal Photocalibration*
- *TUV Safety Certification*
- RS-232 (USB & Ethernet Options)
- Lamp Lifetime Indicator
- *Manual or Serial Control*
- Internal Filter Holder
- *100-240VAC Operation*
- *Smallest Form Factor*

APPLICATIONS

- Hyperspectral Imaging
- CIE-A Illuminant Standards
- Biomedical Diagnostics
- CCD/CMOS Sensor Testers
- NIR Applications (700-2000nm)
- Food Processing
- Digital & Confocal Microscopy
- Pharmaceutical Development
- Precision Scientific R&D

3900e

Fully Automated Internal Lamp Calibration



A member of the robust *SmartLite™* family, the 3900e integrates the short and long term stability of the 3900 with the calibration technology of the 4900, providing the only truly easy to use, easy to implement fiberoptic lightsource. Updated using fully digital control loops, the 3900e is our most stable, repeatable, and widest dynamic ranged tungsten halogen lightsource to date - as well as being our most compact.

Requiring no external companion calibrator, the 3900e offers the industry's first ever integral *AutoCal™* feature, ensuring that every system manufactured provides the same photonic output - forever. That means the same photonic output after numerous lamp replacements - even when performed by untrained operators that are outside of the OEM's control. Calibration is performed only when a new lamp is deployed and is a simple one button operation. Perfect for applications where FDA cGMP standards 21 CFR Parts 210 and 211 (Pharmaceuticals) and 21 CFR Part 820 (Medical Devices) mandated compliance standards for equipment/process validation and calibration.

During auto-calibration the 3900e also performs a proprietary lamp characterization which then provides a highly precise and reliable measure of the lamp's condition and usable lifetime - dramatically reducing unscheduled maintenance. This measure is displayed on the front panel as a tri-colored LED, and as an analog signal gauge which estimates percent of life remaining.

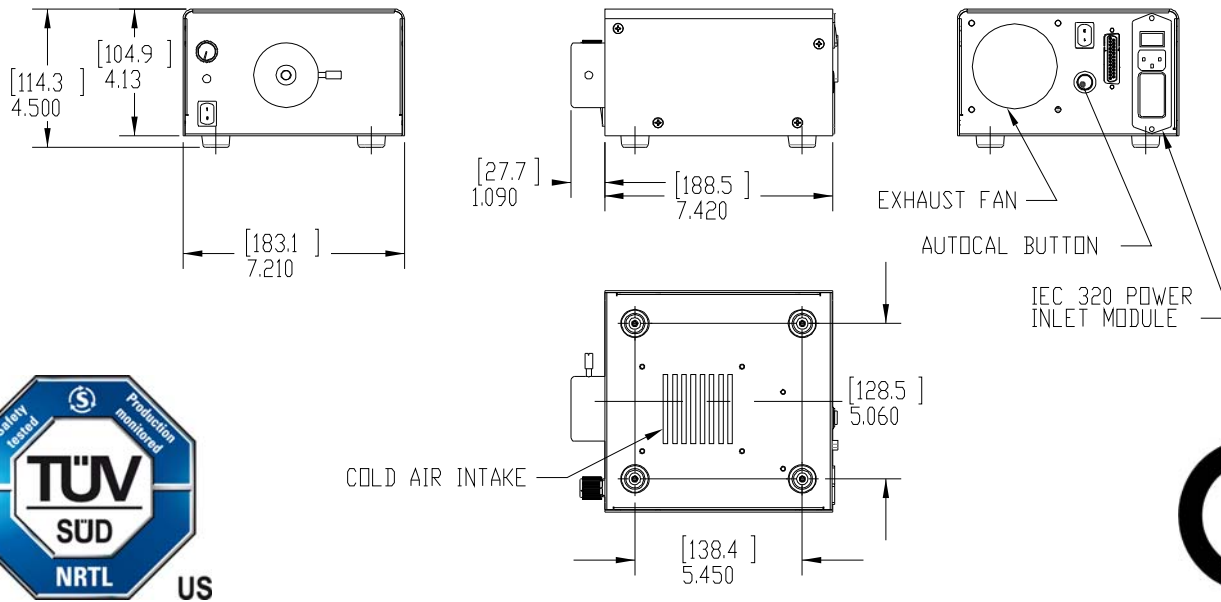
The 3900e unit accepts all of the standard Illumination Technologies accessories including the entire line of standard and custom fiberoptic light delivery components. Fiberoptic receptacles for all major brands are also available. All Illumination Technologies products offer a full one year warranty.

PART NUMBER: **3900e-LL-II-RR**



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| <p>LL (Lamp Designator)</p> <ul style="list-style-type: none"> -Blank (3000K, 400-750nm) -ER (400-2200nm) -IR (750-2200nm) -HC (4200K, 400-750nm) | <p>II (Interface Designator)</p> <ul style="list-style-type: none"> -Blank (RS-232) -ET Ethernet Interface -US USB | <p>RR (Receptacle)</p> <ul style="list-style-type: none"> -Blank 16mm (0.63") -VO 15mm (0.59") -FO 18.3mm (0.72") -DJ 25.4mm (1.0") |
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DETAIL DRAWING



TECHNICAL SPECIFICATIONS

Physical

Height: 4.5" (115mm)
 Width: 7.2" (185mm)
 Length: 7.5" (190mm)
 Weight: 4.4lbs (2.0kg)

Electrical

Input: 100-240VAC
 50/60Hz
 Input Power: 290VA
 Inrush 120V 3.6A
 Current: 240V 2.6A

Output Stability

Regulation: 0.1% (Photometric)
 Noise: 0.1% (Photometric)
 Long-term: 1.0% (Photometric)

Regulation Scheme

Short-term: Linear DC Regulator
 Long-term: Optical Light Feedback

Environmental

Temperature: 0 to 40C
 Relative Humidity: 0 to 95%

Control

Manual: Front Panel Pot
 Standard Serial: RS-232
 COM Options: USB, Ethernet
 SS Relay: Manual & Serial

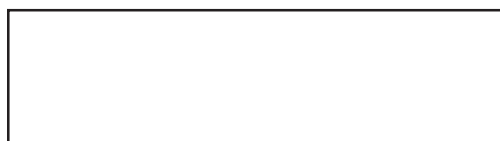
Diagnostics

Lamp Status: Tri-color LED
 Lifetime Gauge: 0-5VDC

Lamp Options

Visible: 9596-B
 High Color: 9596-HC
 CIE-A: 9596-ER
 NIR: 9596-IR

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