

1 GENERAL SYSTEM DESCRIPTION

1.1 System Features

The **Y1880**, 300-Watt Xenon light source described herein is specifically designed for use as an illumination source for fiber optic illumination applications. As a result, the system shall have the following general features:

- 1.1.1 Single port flush mount fiber optic adapter to fit ACMI industry standard fibers
- 1.1.2 Simple lamp module replacement with no tools required
- 1.1.3 Simple power "ON" switch separate from the lamp ignition switch
- 1.1.4 Standard lamp safety features
- 1.1.5 Low noise generation
- 1.1.6 High brightness light output
- 1.1.7 Compact footprint
- 1.1.8 Quick re-strike in the event that the device shuts down from overheating
- 1.1.9 Single world-wide universal power supply

2 INTENDED USAGE

2.1 General

This 300 W Xenon light source shall be used as an illumination source to provide light to fiber optic cables or light guides. **PerkinElmer assumes no responsibility for suitability for any particular application of the lightsource or any consequential damages associated with the use of the lightsource.**

2.2 Personnel

- 2.2.1 Any trained personnel that has familiarized themselves with the product by reading the operation manual provided

2.3 Sterilization/Disinfection

- 2.3.1 The light source may be wiped-down with hospital approved disinfectants (e.g. 10% clorox/90% water solution) applied with a damp cloth.

3 ASSOCIATED EQUIPMENT

- 3.1 Fiber optic light guides (cables) not provided by PerkinElmer

Y1880

CERMAX 300Watt Xenon Fiber Optic Illuminator for Atlas Specialty Lighting



| | Specification | Comments |
|---|--|---|
| 1 Electrical Input | | |
| 1.1 | Input Voltage 100 - 240 VAC, 50/60Hz universal, 6.0A input | |
| 1.2 | AC Power Connector Located on rear panel, dual fuses | |
| 1.3 | Line cord IEC320, 6', US and Europe options | |
| 2 Performance, Features & Warranty | | |
| 2.1 | Light Output - 1400 Lumens nominal initial output through 6mm glass rod at full rated power - Spectral output 380 - 750nm nominal - ≤ 8% instability p-p through 6mm glass rod @ 0-100Hz | All light output specifications refer to "system only" performance. Light output via optical fibers or other optical components may vary. |
| 2.2 | Overtemperature Protection Automatic shut down in the event of overheating | Fans operate when AC power is on and are independent of lamp status. |
| 2.3 | Over Heat Recovery / Auto Cool Unit to become fully operational within approximately 3 minutes after thermal shut down & all obstructions to air flow removed at environmental temperature of ≤ 22C (72F) | Fans will remain on in the event of thermal shut down when power is ON. Lamp must be switched on by using lamp ON / OFF switch located on front panel |
| | Lamp Power Supply PS300-12 type | |
| 2.4 | Lamp Module Y1881 "Low Profile" CERMAX 300 Watt lamp module, utilizing Y1711 lamp | |
| 2.5 | Lamp Module Replacement By easy access to lamp module via latched hinged door. No tools required. | Lamp replacement door "interlocked" for safety. Lamp power will be cut when door is open |
| 2.6 | Lamp Life - 500 hours to 50% of initial output specification measured through 6mm glass rod - ≥ 1000 hours typical measured through 6mm glass rod | |
| 2.7 | System Warranty 12 months excluding lamp | |
| 3 User Interface / Control | | |
| 3.1 | User Instructions Operation manual to be included with every lightsource | |
| 3.2 | Standby Switch Located on front panel, illuminated when ON | Lamp ignition not automatic with standby switch ON |
| 3.3 | Lamp ON / OFF Switch Located on front panel. Illuminated when lamp is ON. | When lamp ON button is depressed to turn lamp on, the "lamp on LED" flashes until such time as the lamp ignites. If the lamp fails to ignite in approximately 4 seconds (possible fault condition) the system will time out and the lamp ON button will need to be depressed again to initiate lamp ignition. |
| 3.4 | Fiber Optic Adapter - Single ACMI adapter | |
| 3.5 | Light Attenuation Shutter - Controlled by membrane buttons on front panel. - 2 Buttons for relative intensity increments (up and down) - 1 button for shutter fully closed - 1 button for shutter fully open - Relative level of illumination indicated by a digital numeric display (blue numerals) | |
| 3.6 | Lamp Hour Counter - Lamp hour mode is selected while "Lamp Hours" button located on front panel is depressed. - While lamp hour mode is selected the number of elapsed lamp hours will be displayed on the relative brightness display. - Elapsed lamp hours will be displayed up to 999 hours. - Elapsed lamp hours displayed can be reset by end user | Lamp hour counter also records number of time the lamp hours have been reset. This number is displayed when lamp hours are re-set. |
| 4 Mechanical & Environmental | | |
| 4.1 | Dimensions Height 5.0" x Width 16.9" x Depth 13.8" (nominal) | Designed for modular expansion |
| 4.2 | Exterior finish Atlas Specialty Lighting art work and colors | |
| 4.3 | Weight 20lbs (9kg) nominal | |
| 4.4 | Touch Temperature Per UL2601-1 | |
| 4.5 | Sterilization The light source may be wiped-down with hospital approved disinfectants (e.g. 10% clorox/90% water solution) applied with a damp cloth (must not be wet) | |
| 4.6 | Operating Temperature 6C to 40C | |
| 4.7 | Storage Temperature -20C to + 85C | |
| 4.8 | Operating & Storage Humidity 10 - 85% relative humidity, non-condensing | |
| 4.9 | Operating Pressure 1 Atmosphere nominal | |
| 4.10 | Audible Noise < 45dB | |
| 4.11 | Shipping, Shock & Vibration per ISTA 1A | |
| 4.12 | Cooling Vents to direct airflow toward the back of the unit | |
| 5 Regulatory Approvals | | |
| 5.1 | Compliance to standards -IEC 60601-1:1998+A1:1991+A2:1995+A1.3:1997 -UL 60601-1:2003 -EN 60601-1:1990+A1:1993+A2:1995+A13:1997 -EN 60601-1-2:2001 -CAN / CSA C22.2 No. 601.1/M90(R1997),B/98,S1-94 | |
| 5.2 | Regulatory Markings - UL mark - CUL mark - CE mark | |
| 6 Limitation of PerkinElmer Liability : | | |
| PerkinElmer assumes no responsibility for the suitability of this lightsource for any particular application or any consequential damages associated with the use of this lightsource | | |