

Tomorrow's Innovation

TITAN X450



The TITAN's 400 watts of Bright White light is the only lightsource on the market that delivers this amount of light to the surgical site.

- New Ceramic body elliptical lamp
- New Touch Screen Controls
- 1,000 hour lamp
- Dual Fan Cooling System
- External Air Filter
- Automatic Shutter
- Standby Mode
- New Mechanical Lamp Alignment
- Consistent High Lux Output
- Internal Self Diagnosis

TITAN X350

The TITAN's 300 watts of Bright White light is superior to any other 300 watt system in the market due to the advanced optic design.

- New Ceramic body elliptical lamp
- New Touch Screen Controls
- 1,000 hour lamp
- Dual Fan Cooling System
- External Air Filter
- Automatic Shutter
- Standby Mode
- New Mechanical Lamp Alignment
- Consistent High Lux Output
- Internal Self Diagnosis



TITAN X300



300 watts of Bright White light
Enhanced Quality
Whisper Quiet Operation

- Consistent High Lux Output
- 1,000 hour lamp
- Manual Intensity Slide
- Advanced Air Flow
- Automatic Shutter
- Reliable
- Whisper Quiet
- Quality, Performance and Advanced Aesthetics

TITAN X450 & X350

- Lamp Type Ceramic Type Xenon Lamp
- Lamp Power Rating 400 Watts & 300 Watts
- Lamp Color Temperature 5,600K
- Lamp Warranty 1000 Hours (Typical)
- Front Panel Controls On/Off Switch, Touch Screen Controls, Turret
- Input Voltage Range 100 – 120 VAC 50 /60Hz, 220–240VAC 50Hz
- Power Consumption 720 Watts & 450 Watts
- Regulatory UL60601, EN 60601-1, EN 60601-1-2, CAN/CSA, C22.2, No 601.1-M90, CE
- Equipment Class BF-TYPE
- Dimensions 338mm (13.3") W x 155mm (6.1") H x 457mm (18") D
- Weight 10.0 kg (22 lbs)

TITAN X300

- Lamp Type Ceramic Type Xenon Lamp
- Lamp Power Rating 300 Watts
- Lamp Color Temperature 5,600K
- Lamp Warranty 1000 Hours Prorated
- Front Panel Controls On/Off Switch, Attenuator Control, Turret
- Input Voltage Range 100 – 120 VAC 50 /60Hz, 220–240VAC 50Hz
- Power Consumption 450 Watts
- Regulatory UL60601, EN 60601-1, EN 60601-1-2, CAN/CSA, C22.2, No 601.1-M90, CE
- Equipment Class BF-TYPE
- Dimensions 338mm (13.3") W x 155mm (6.1") H x 457mm (18") D
- Weight 10.0 kg (22 lbs)

Ordering Information

- TITANX450ST-K 400 Watt Xenon Lightsource, 4 Port Turret
- TITANX350ST-K 300 Watt Xenon Lightsource, 4 Port Turret
- TITANX300ST-K 300 Watt Xenon Lightsource, 4 Port Turret
- SSL0070T Floorstand for TITAN Lightsources
- SSX0450 Replacement Lamp Module for TITANX450
- SSX0350 Replacement Lamp Module for TITANX350
- SSX0300 Replacement Lamp Module for TITANX300

(For International use replace -K with required power cord plug)



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Manufactured by: **Sunoptic Technologies, 6018 Bowdendale Avenue, Jacksonville, Florida 32216**

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Tomorrow's Innovation

TITAN RCS Headband

The New TITAN "RCS" Rear Cranial Support Headband provides enhanced comfort due to the lightweight and flexible material. The new front to back crown support design allows for better module adjustment and stabilization. These features help minimize the fatigue that sets in during lengthy surgical procedures.



- Lightweight, Comfortable and the new "RCS" helps minimize fatigue
- BRIGHTEST Illumination Available
- Module spot sizes offered: 20mm-110mm
- Headlight cables available in bifurcated and straight configuration
- Lensed 3.5mm fiber bundle with Grey armoured sheathing 9ft long
- Fused fibers on the proximal end increase transmission efficiency by 10%
- New Molded UltraGrip Handle eases cable removal from the lightsource and aids against fiber damage

TITAN Sport Headband

TITAN Molded UltraGrip SPORT Headlight System provides bright illumination and superior performance along with the level of comfort and stability required by surgeons' during surgical procedures.



TITAN RCS Headband Specifications

- Newly Designed Lightweight Headband with Rear Cranial Support for added comfort
- Headlight Module with 20mm-110mm Variable Spot @ 16"
- Fused 3.5mm Bifurcated Molded UltraGrip Cable 9' Long with Wolf Lensed Proximal End to optimize light output Also available in 20mm-140mm Variable Spot @ 16"
- New Molded Junctions add Flexibility and the Reinforced Sheathing Protects the Fiber Bundle
- Headband with Module Weight - 4.5 oz
- Headband, Module and Bifurcated Cable Weight - 6.5 oz

System Includes:

- 1 Headlight With Rear Cranial Support "RCS"
 - 1 20mm-110mm Variable Spot Module
 - 1 3.5mm Bifurcated 9' Long UltraGrip Cable with Lensed Wolf Proximal End
 - 2 Prepackaged, Sterile, Disposable Joysticks
 - 1 Duffel Bag for storage
- ALSO AVAILABLE AS A TITAN SPORTBAND



Ordering Information

- SG35-110-VHB "RCS" Headlight 110mm Variable Spot Module and Molded UltraGrip Bif Cable
- SL35-110-VHB "RCS" Headlight 110mm Variable Spot Module and Molded UltraGrip Bif Cable
- SG35-110-VSS Sportband Headlight 110mm Variable Spot Module and Molded UltraGrip Straight Cable
- SL-0040 Replacement Foam Comfort Liners (Set of 3)
- SL-0013 Replacement Sterile Joysticks (Set of 10)
- SL-0080 Replacement 3.5mm Bifurcated Headlight Cable
- SG-0080 Replacement 3.5mm Molded UltraGrip Bifurcated Headlight Cable
- SL-0088 Replacement 3.5mm Straight Headlight Cable
- SG-0088 Replacement 3.5mm Molded UltraGrip Straight Headlight Cable
- Sport2 Replacement Sportband (set of 2)



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ISO 9001 and 13485 Certified

Tomorrow's Innovation

TITAN HD Headlight Camera



Sunoptics Surgical TITAN HD Headlight Camera offers the comfort and stability of the new RCS headband and provides the high quality video needed for teaching and documenting surgical procedures.

- Brightest Illumination
- Fused fiber optic cable increases light transmission
- Working distance is 12 in to 26 inches
- Light weight: Camera weighs less than 1.2 ounces
- High Definition of 1920 x 1080p
- 60 Frames per seconds
- (2)DVI & 3G SDI Video output
- Capture Still images
- Start and Stop recording via, tablet console or footpedal
- Download video and images via USB port on the front panel of the console

TITAN HD Documentation System

Sunoptics Surgical TITAN HD Video Documentation System is designed to provide the surgical team with the brightest light and the means of viewing high definition video in the OR during surgical procedures.

The use of the system allows the entire operating team to view exactly what the surgeon is doing and anticipate the next step in the procedure making the entire team more efficient.



TITAN HD Video Documentation System

Sunoptics Surgical® TITAN HD Camera Documentation System® provides the surgical team with the capability of documenting surgery for training purposes or for inclusion in medical referrals and records.

Interaction with the system is via a set of touch screen controls on front panel of the console or via Tablet. The controls may be used to enter patient information, hospital information, procedure and surgeon information. The Touch Screen controls are also used to control functions such as "record video", "stop recording video", record a still picture, playback, and "print stills". The Icons are also used for various administrative functions and for downloading video to an external storage media such as USB memory stick or USB hard drive.

Specifications

Camera

- 1/3" CMOS single chip
- 1080p 60fps native video
- Focus 12" to 26"

CCU

- Stills captured in 1080p - BMP, JPEG, PNG
- Video captured in 1080p - H.264 Encoding, .m2ts (MPEG-2 Transport Stream)
- Hard drive capacity - 256GB solid state drive (Approx 70 hours of video)
- Dual Channel - Record two video signals simultaneously
- Export Images - Via USB, Network, or Wirelessly

Tablet

- Samsung Galaxy 2 10.1
- OS - Android
- Display - 10.1" WXGA (1280x800) PLS TFT
- Connectivity - Connect to CCU via USB or 802.11 Wi-Fi
- Device Management - Configure CCU presets and system setup and Customize User profiles
- Image Management - Manage case information and initiate still or video capture
- Sharing - Share stills or video via email, network, or wirelessly

Ordering Information TITAN HD Video Imaging System

Part Number Description

- HDC-1 TITAN HD Headlight Camera, CCU w/ Full Image capture, and Tablet
- HDM-1 26" Medical Grade HD Monitor
- HDW-1 Wireless Transmitter and Receiver
- HDVC-1 TITAN HD Video Cart
- HDFP-1 TITAN Foot Switch

(for international ordering please specify plug required)



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Tomorrow's Innovation

SSL-9000 LED Headlight



Sunoptics Surgical SSL-9000 LED Headlight delivers the bright white light needed for surgical procedures. The LED light provides the surgeon with a homogenous spot for true tissue color recognition. The battery powered LED headlight offers the freedom from being tethered to a lightsource by a fiberoptic cable. The RCS headband and the lightweight LED module provide stability as well as comfort.

- The new "RCS" is Lightweight and Comfortable
- 10w LED offers the BRIGHTEST Illumination available
- Module with variable spot size: 20mm-80mm @ 16"
- Light Intensity: 43,000 Lux @ 16"
- Lightweight battery and clip on holster provide 2hr 45 min of continuous use
- Audible warning when battery life is low
- NEW inline cable connection

SSL-8500 LED Sport Headlight



Sunoptics Surgical LED Sport Headlight offers all the same LED light features as mentioned above and has been designed to provide stability and comfort for surgeons who prefer the Sportband style.

- The new "RCS" is Lightweight and Comfortable
- 10w LED offers the BRIGHTEST Illumination available
- Available module spot size: 20mm-80mm @ 16"
- Light Intensity: 43,000 Lux @ 16"
- Lightweight battery and clip on holster provide 2hr 45min of continuous use

SSL-9000 LED Headlight

10w LED Producing Bright, White Light

- Color temperature: 4500°K
- Typical LED life: >50,000 hours
- Newly Designed Lightweight Headband with Rear Cranial Support for added comfort
- Variable Module Spot 20mm-80mm @ 16"
- Variable Intensity Control: 0 – 43,000 Lux at 16"
- Headband with LED Module Weight – 9 oz
- Battery and Holster Weight – 12 oz
- Battery Life – 2 hrs 45 min @ Full Intensity, 5 hrs 30 min at Half Intensity
- Battery Charger Accepts 100-240V AC, 50/60 Hz input for worldwide operation
- Battery Recharge Time – 3.5 hrs
- Warranty Three (3) Years on LED Headlight and One (1) Year on Battery

Classification:

- European Class I, Active device per Annex IX, rule 1
- FDA Class I, Device Listing 125713
- Complies with Essentials Requirements Matrix of MDD 93/42/EEC, amended by 2007/47/CE

System Includes:

- 1 LED Headlight with Rear Cranial Support "RCS"
- 1 Clip-on Power Pack with rechargeable Battery
- 2 Rechargeable Batteries
- 1 Single Bay Battery Charger
- 2 Garment Clips
- 1 Padded Carrying Bag with Shoulder Strap



Ordering Information

- SSL-8500 Complete LED Headlight System (with RCS Headband)
 - SSL-8500-SB Complete LED Headlight System (with Sportband)
 - SSL-9000 Complete LED Headlight System (with RCS Headband)
 - SSL-9000-SB Complete LED Headlight System (with RCS Headband)
 - SSL-80CB Replacement Carrying Bag
 - SSL-2054BE Replacement Battery
 - SSL-2054C Replacement Battery Charger
 - SSL-2054H Replacement Battery Holster (Not Encrypted)
 - SSL-2054HE Encrypted Battery Holster
 - SL-0040 Replacement Comfort Liners (Sets of 3)
 - SPORT2 Replacement Sportband (Set of 2)
- (for International ordering please specify plug required)



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Tomorrow's Innovation

LED 4000



Sunoptics Surgical LED4000 is a state-of-the-art LED Lightsource designed to provide light for Headlight and endoscopic procedures. The lumen output is comparable to many Xenon lightsources currently being used in endoscopy. The expected LED life of 30,000 hours eliminates the need to purchase replacement lamps, thus saving money in operational cost.

- Compact, efficient, durable source of brilliant "daylight" quality light for endoscopy.
- Expected LED life of 30,000 hours
- Color temperature: 6500°K @ 75 CRI for maximum output 5600°K @ 92 CRI for fuller spectrum
- Ergonomically designed turret includes ACMI, Olympus, Storz, & Wolf ports; single port version and other options.
- LED automatically shuts off when cable is removed from active port.

Sunoptics Surgical LED3000 is a state-of-the-art LED Lightsource designed to provide light for endoscopic procedures. The lumen output is comparable to many Xenon lightsources currently being used in endoscopy. The expected LED life of 30,000 hours eliminates the need to purchase replacement lamps thus saving money in operational cost.

- Compact, efficient, durable source of brilliant "daylight" quality light
- Ideal for office use and post OP examinations
- Expected LED life of 30,000 hours
- Color temperature: 6950°K nominal
- Ergonomically designed turret includes ACMI, Olympus, Storz, & Wolf ports; single port versions and other port styles are also available.

LED 3000



LED 2000



- Compact, efficient, durable source of brilliant "daylight" quality light
- Ideal for office use and post OP examinations
- Expected LED life of 50,000 hours
- Color temperature: 6500°K nominal
- Ergonomically designed turret includes ACMI, Olympus, Storz & Wolf ports; single port versions and other port styles are also available.

LED 4000 & LED 3000 Lightsource

- Compact, efficient, durable source of brilliant "daylight" quality light for headlights and endoscopy.
- Lumen output comparable to many Xenon units but more stable and consistent.
- Expected LED life of 30,000 hours (15 years @ 40 hrs/week x 50 weeks/year) eliminates costly periodic lamp changes.
- Color temperature: LED4000 6500°K @ 75 CRI or 5600°K @ 92 CRI. LED3000 6950°K
- Electronic (PWM) intensity control from 0-100%; variety of linear & geometric dimming profiles available for optimum performance with cameras.
- High-level Command Interface facilitates remote control and status access through integral RS232 and USB ports.
- Ergonomically designed turret includes ACMI, Olympus, Storz, & Wolf ports; single port versions (shown above) and other port styles are also available.
- LED automatically shuts off when cable is removed from active port.
- Standby mode turns off LED but keeps lightsource energized and adjustable.
- Accepts 100-240V AC, 50/60 Hz input power for worldwide operation.
- Regulatory: IEC60601-1 3rd Edition, CAN/CSA C22.2 No. 601.1, CE mark.
- Dimensions: 11" W x 4.5" H x 11" D; weight 3.4kg (7.5 lbs).

LED 2000

Sunoptic Surgical SSL-2000 Lightsource

- 50W Solid State LED Light
- Compact, efficient, durable "daylight" light
- Premium LLS-2000 utilizes new high efficiency design
- Color temperature: 6500° K nominal
- Typical LED life: >50,000 hours
- Low power consumption: 52W typical
- Electronic (PWM) intensity control from 0-100%
- Four-port turret and single port versions available
- Standard ports are ACMI, Olympus, Storz, and Wolf, other ports available
- Accepts 100-240V AC, 50/60 Hz input power for worldwide operation
- Regulatory: UL60601-1, CAN/CSAC22.2 No. 601.1, EN60601-1-2; CE marked
- Dimensions: 4.65" W x 3.32" H x 7.25" D (~10" overall)
- Weight: 1.14 kg (2.5 lbs)

Ordering Information

- SSL-4000T-SC-K LED-4000 lightsource with Standard CRI and "K" cord
- SSL-4000T-HC-K LED-4000 lightsource with High CRI and "K" cord
- SSL-3000T-K LED-3000 lightsource with "K" cord
- SSL0070T - Sunoptic Floorstand
- SG40-110-VHB - GREY "RCS" HB, 110MM VAR. SPOT MODULE, SU-0097 BIF CABLE
- SU-0097 SUNOPTIC, 4MM, FUSED HEADLIGHT CABLE, WITH MOLDED GRIP FOR LED LIGHTSOURCES

(FOR INTERNATIONAL ORDERING PLEASE SPECIFY CORD REQUIRED)



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Tomorrow's Innovation

UltraGrip Endoscopic Cables



Sunoptics Surgical Endoscopic cables are manufactured to a high standard of quality, performance and reliability. They are skillfully manufactured in-house with medical grade materials and comply with FDA regulations, and ISO 13485 certification. New to our extensive line of Endoscopic cables is Sunoptics Surgical's Moulded UltraGrip handle, a patented ergonomic design feature that provides added strain-relief, plus durability and ease of cable removal from the lightsource.

Our headlight cables are designed to deliver the maximum light output and performance when used with our Sunoptics Surgical headlights. The patented process of fusing the fiber bundle at the proximal end combined with using a high quality lens to focus the light results in an increase in light transmission outperforming the competition. This along with Sunoptics Surgical Moulded UltraGrip handle provides added strain-relief, plus durability and ease of cable removal from the lightsource.

Headlight Cables



Replacement Cables



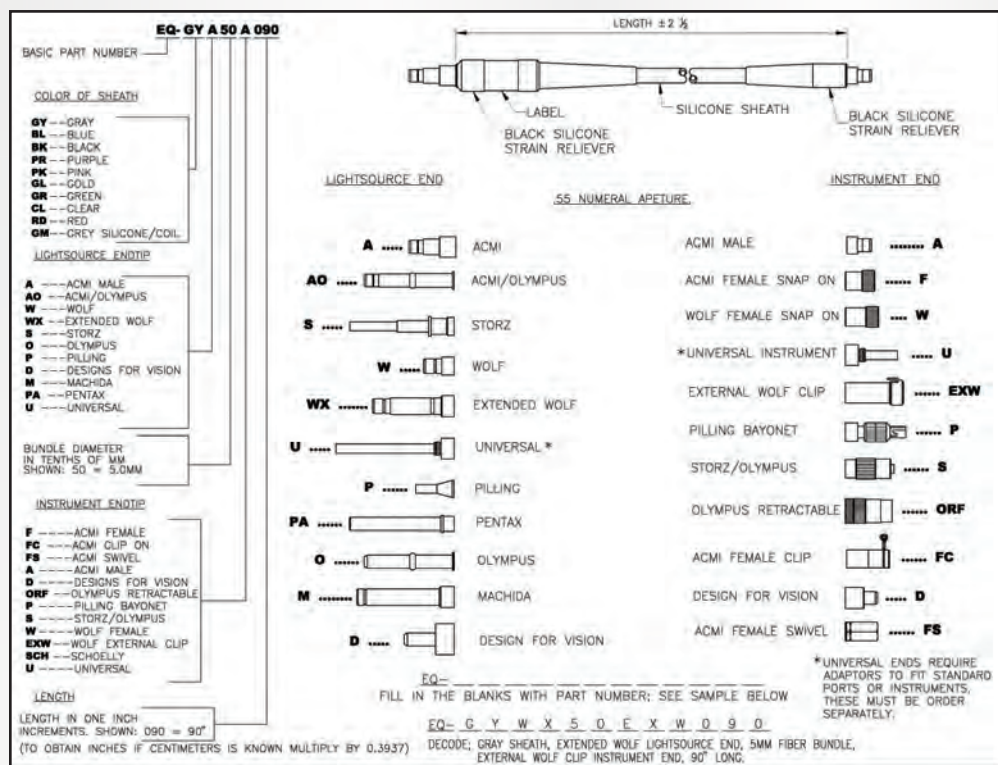
Sunoptics Surgical replacement headlight cables are manufactured with the same quality and performance as our standard fiberoptic cables. We offer high quality replacement cables for the following competitors: Integra/Luxtec, Welch-Allyn, BFW, Aculux, Isolux and Applied Fiberoptics.

Endoscopic Cables - Universal / Dedicated

Sunoptics Surgical fiberoptic cables are designed to deliver maximum light when coupled to a medical grade fiberoptic lightsource. They are compatible with virtually all endoscopes, medical instruments, and microscopes. The cables can be manufactured with bundle diameters ranging from 3.0 mm to 5.0 mm to match the bundle of the instrument being used to provide optimal lighting. We offer eight different opaque colors of medical grade silicone sheathing so that each department can have its own unique identifier. All of our endoscopic cables are hermetically sealed and can be sterilized using steam autoclave, cold soak, Steris, or Sterrad.

Endoscopic Cables - Universal Style

Sunoptics Surgical Universal cables can be used with various adapters according to the lightsource and instrument that is to be used for a procedure. Each end of the cable has to be fitted with a thread on adapter to properly function. This gives the versatility of creating a custom cable by simply changing the adapters on each end.



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