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German manufacturing plant

Tuttlingen - GERMANY
Surface : 2,600 m²

French manufacturing plant

La Ciotat - FRANCE
Surface : 3,200 m²
1 COMPANY

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1 COMPANY

SOPRO

1977
SOPRO was founded.

1986
Introduction of microcameras for endoscopy.

2001
SOPRO joins the Acteon Group.

2003
Sopro moves into a bigger, brand new building in La Ciotat.

2004
Acquisition of Geyser and development of a range of insufflators and pumps.

COMEG

1975
COMEG was founded.

1977
Introduction of medical endoscopes.

1993
Introduction of autoclavable endoscopes.

1994
Introduction of the urology product line.

2001
New optical generation of medical endoscopes.

SOPRO COMEG

2006
COMEG joins SOPRO

2007
Introduction of a Spine surgery product line

2009
Introduction of the SOPRO 397 3CCD Full HD camera
              Introduction of the Sopro Medical Software
              Introduction of a range of bipolar forceps & scissors

2010
Introduction of the Full HD laparoscope
              Introduction of HEOS, the hysteroscopic endo operative system
              Introduction of UBIPACK, the complete solution for gynecology and ENT

2011
Introduction of ULYSS, 4mm autoclavable endoscope with variable direction of view

2012
New range of uretero-renaloscopes

2013
Introduction of a bipolar resectoscopy range

2014
Introduction of SYMBIOZ and the SCard
SOPRO-COMEG offers a complete range ranking from capital equipment to re-usable, high quality, durable instruments. Whatever your application is: Urology, Laparoscopy, Arthroscopy, Gynecology, Spine, ENT, SOPRO-COMEG will offer you the best solution and fulfill your needs.

Capital equipment
SOPRO-COMEG meets the needs of international surgeons and distributors by supplying complete solutions for video endoscopy. Our range includes equipment for both consulting and operating rooms, using latest technologies available in the market. Full HD video cameras, Xenon and LED light sources, insufflators, pumps, shaver, medical grade monitors and visualization/archiving systems. These products have already proven their worldwide reliability and are considered today as a standard in the mini invasive surgery field.

Laparoscopy
SOPRO-COMEG proposes a complete range of instruments for entry into the peritoneum, the first and most crucial step in successful laparoscopic surgery. A complete range of hand instruments in both monopolar and bipolar electrocautery versions is also available. The full HD 10mm laparoscope will provide you the quality you need for High Definition picture.

Urology
SOPRO-COMEG, a company with over 25 years experience in the urology field, offers endoscopes with exceptional optical quality and a complement of instruments which will ease even the most demanding urological procedures including: cystoscopy, resectoscopy and urethrotomy. These products are an integral part of recent technological advancements which improve the diagnosis-treatment process and the level of care that urologists can now offer to their patients.

Gynecology
Gynecology, hysteroscopy, resectoscopy and other procedures are made easier with the SOPRO-COMEG products. Clarity and efficiency are the key words of our gynecology range.

Arthroscopy
Sharp images, precision in visualization are possible through the use of our range for arthroscopy from 4.0mm telescopes to the small joint arthroscopic lines.

Spine
Our spinal endoscopy system allows to treat disc-diseases. All types of hernias can be removed in a minimal invasive interlaminar approach, by means of the endoscopic technique. The technique also qualifies for the effective treatment of chronic back ailments caused by disc-prolapses or tears. Furthermore, endoscopic treatment of spinal stenosis has increased.

ENT
Our field of activities also includes all areas of the ENT disciplines, whether it is diagnostics or therapy, practice or clinic. We propose rigid endoscopes and accessories necessary for sinuscopy, otoscopy and laryngoscopy. All our instruments are manufactured with the highest quality materials.
Our business practices and processes are designed to achieve quality results that exceed the expectations of patients, customers, surgeons. We are dedicated to the delivery of quality healthcare products around the world.

From the start of development of a new device through manufacturing to the final quality control check before delivery, Quality is built in to all our products, as is our commitment and dedication to our customers throughout the world.

Both plants are certified to the highest international quality standard, ISO 13485 for Design, Manufacturing and Sales. Our products comply with the various regulations established across the world, specifically those required by the Food and Drugs Administration and the European Union.

SOPRO and SOPRO-COMEG manufactures equipments and endoscopes in accordance with the following directives or standards:

- Medical device directive 93/42 EEC (M5 2007/47 EEC)
- Series of standards IEC 60601
- Series of standards ISO 8600
- FDA regulations* (FDA Quality system Regulation 21 CFR Part 820).
- EC attestations issued for all our class II devices.

*the newest ones may be 510(k) pending.
Innovation being the key to improve health, SOPRO-COMEG invests a significant part of its revenue in R&D and patents filing. Our world-renowned know-how is medical imaging, relying on senior engineers with strong expertise in electronics, software, optics and mechanics. Also, we in SOPRO-COMEG, have access to the very wide R&D department and connections of our mother company, Acteon group, adding to the previous know-how: ultrasounds, chemical, motors, X-Ray and Cone Beam Computed Tomography systems (CBCT).

This very rare combination of know-how allows us to join the extremely limited group of the companies mastering the design & the manufacturing of the complete endoscopy solution.

SERVICE & ASSISTANCE

In both our main plants (La Ciotat and Tuttlingen), our on-site specialists are dedicated to servicing and providing expertises to your SOPRO-COMEG products:

- Express repair of all our products under warranty
- Free quotation for all repairs out of warranty
- Qualified repair with original spare parts
- Streamline endoscope exchange program
- Technical training

SOPRO-COMEG REPRESENTATIVE OFFICES

Our local staff will support you, wherever you are in the world.

- **China** - ACTEON China
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  Tel +962 6 553 4401
  info.me@sopro-comeg.com

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  ajay.sadana@in.acteongroup.com

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  Cambridgeshire, PE19 8TT
  Tel +44 1480 477 307
  info@acteongroup.co.uk
  www.acteongroup.co.uk

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  Industriestraße 9,
  40822 Mettmann
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  timo.hand@de.acteongroup.com

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  21057 Olgiate olona ( Varese)
  Tel : +39 0331 376 760
  andrea.castellini@acteongroup.com
2 VIDEO CAMERAS

ORION - 3Cmos Full HD camera .................................. p12
SOPRO 397 - 3CCD Full HD camera ............................ p14
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SOPRO 367 - 3CCD camera, ...................................... p18
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with integrated LED light source - DUO
SOPRO 181 - 1CCD USB camera - Ubicam ...................... p24
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2 VIDEO CAMERAS

Lead everything in one click

- Six preset environments to fit your surgical application
- Full HD integrated video recorder
- Built-in HD zoom
- All features available from the camera head
- 3CMOS full HD sensors for impressive image quality
VIDEO CAMERAS

SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- 6 optimized preset applications
- Instant and contactless access to preset applications and personal profiles with the SCard
- Unlimited personal profiles
- Connected to Sirius & Vega
- Full HD Images and videos recorder integrated
- All functions available from the camera head (NAV)
- Freeze, mirror and gain functions
- Brightness, details, red and blue gains, gamma, color adjustments
- Noise reducer
- Reset to manufacturer settings
- Electronic anti-moire filter for flexible endoscopes
- Automatic white balance
- Color bar generator
- Automatic electronic shutter (1/50 to 1/100000)
- Adjustable or automatic shutter area
- On screen displayed adjustments
- Automatic blemish pixels compensation
- Outputs : DVI, HDSDI, Y/C, Comp, Periph
- Dimensions (W x H x D) : 310 x 136 x 385 mm
- Weight : 4300 g
- Power supply : (90-230 VAC~ ; 50-60Hz)
- Power consumption : 60VA
- 2T 2.5A – 250V fuses (only fuses marked UR)

SPECIFICATIONS OF THE CAMERA HEAD

- 3CMOS 1/3'' Full HD sensors
- HD 16-34mm zoom integrated
- Resolution 1920 x 1080 pixels
- 3 fully programmable buttons
- Ergonomic design
- Progressive scan technology
- Ergonomic focus/zoom rings
- Free scope rotation and locking system
- Definition : 1080 lines
- Sensitivity : 5 lux
- Signal/Noise ratio : 54 dB
- Cable length : 3m
- Dimensions (D x H) : 149 x 53 mm
- Weight : 270 g
- Waterproof for cold disinfection

REGULATORY & ENVIRONMENT

- Electrical safety : Class 1, CF type
- Comply with the European standard 93/42/EEC – Class I
- Comply with the international standards IEC 60601-1 ; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range : +10°C/+40°C
- Operating relative humidity range : 30% à 75%
- Transport and storage temperature range : -10°C / +45°C
- Transport and storage relative humidity range : 20 à 85%
- Operating, transport and storage atmospheric pressure range : 700hPa à 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_398_8000</td>
<td>ORION Full HD camera head with integrated HD 16-34mm zoom coupler</td>
</tr>
<tr>
<td>S_398_9000</td>
<td>ORION Full HD CCU, EU</td>
</tr>
<tr>
<td>S_398_9001</td>
<td>ORION Full HD CCU, US</td>
</tr>
<tr>
<td>S_398_9002</td>
<td>ORION Full HD CCU with Full HD recorder integrated, EU</td>
</tr>
<tr>
<td>S_398_9003</td>
<td>ORION Full HD CCU with Full HD recorder integrated, US</td>
</tr>
<tr>
<td>S_K30_1000</td>
<td>Pack Symbioz, EU (Including ORION**, SIRIUS and VEGA)</td>
</tr>
<tr>
<td>S_K30_1001</td>
<td>Pack Symbioz, US (Including ORION**, SIRIUS and VEGA)</td>
</tr>
<tr>
<td>990228</td>
<td>Application SCards pack (Laparoscopy, Hysteroscopy, Cystoscopy, ENT, Arthroscopy, Flexible)</td>
</tr>
</tbody>
</table>

* See user manual for more information.
** With full HD recorder
2 VIDEO CAMERAS

3CCD Full HD camera

The most detailed image

- Stunning video rendering
- Optimized settings per surgical application
- Camera head with 3 programmable buttons
- Control of insufflator
- On-screen display of insufflator parameters
- Reliable optical zoom to fit all surgical applications
VIDEO CAMERAS

SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Digital zoom Up to 2.5x
- Freeze, Mirror and Gain functions
- Menu by Application
- Electronic anti-moire filter for flexible endoscopes
- Digital processing 3 x 19 bits
- Automatic white balance
- 5 languages (English, French, German, Spanish, Italian)
- Color bar generator
- Modification of the red and the blue gain
- Color Matrix 12 axes
- Automatic saving of the adjusted parameters
- Automatic electronic shutter (1/50 to 1/100 000)
- Adjustable shutter area
- On screen displayed adjustments
- Text generator with keyboard connexion
- Gamma adjustment
- Automatic adjustment of sensitivity to low light (auto exposure control)
- Automatic black level adjustment
- Details adjustment
- Digital Noise Reduction: OFF / LOW / HIGH
- Two peripheral triggerings
- Reset to manufacturer settings
- Automatic compensation function for blemish pixels
- Size of the control unit: W: 300mm; D: 311mm; H: 125 mm
- Weight of the control unit: 2500 g
- 1 DVI-D output
- 2 HD-SDI outputs: 0.8 V [P-P] / 75 ohms SMPTE292M
- 1 Y/C output: Y: 1.0 V [P-P] / 75 ohms, C: 0.286 V [P-P] (NTSC), C: 300 Vp-p V [P-P] (PAL) / 75 ohms Sync Negative
- 1 VBS output: 1.0 V [P-P] / 75 ohms Sync Negative
- Power supply: (110-230 VAC ~ ; 50 - 60Hz)
- Power consumption: 45 VA
- 2 T 2.5A - 250 V fuses (Only fuses marked UR)
- Continuous Service

SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Sensor: 3 CCD 1/3" | 16/9 "wide - screen format acquisition"
- Progressive Scan Technology
- 1080p resolution HDTV format: Resolution: 1920*1080 pixels
- 14 bits processing
- Ergonomic focus ring
- Free scope rotation and locking system
- 3 Programmable buttons

REGULATORY & ENVIRONMENT

- Definition: 1080 lines
- Sensitivity: 1.5 lux
- Signal / Noise ratio : 70dB
- Cable length: 3 meters
- C-Mount
- Size of the sensor: 37*50*95 mm
- Weight of the sensor: 250 g
- Waterproof for cold disinfection*
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

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<th>Art.N°</th>
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<td>S_397_9000</td>
<td>Digital FULL HD 16/9 3CCD CCU, EU</td>
</tr>
<tr>
<td>S_397_9001</td>
<td>Digital FULL HD 16/9 3CCD CCU, US</td>
</tr>
<tr>
<td>S_397_8000</td>
<td>Digital FULL HD 16/9 3CCD camera head, C-mount</td>
</tr>
<tr>
<td>S_097_0001</td>
<td>24mm HD coupler, C-mount, scope holder</td>
</tr>
<tr>
<td>S_097_0002</td>
<td>24mm HD coupler, C-mount, scope holder, with high torque focus ring</td>
</tr>
<tr>
<td>S_413024</td>
<td>16-34mm HD Zoom coupler, C-mount, scope holder</td>
</tr>
<tr>
<td>S_701004</td>
<td>18mm beamsplitter 90°, C-mount, rotatable head, without eyepiece</td>
</tr>
<tr>
<td>700206</td>
<td>Medical keyboard, soakable, QWERTY, PS2</td>
</tr>
</tbody>
</table>

* See user manual for more information
2 VIDEO CAMERAS

3CCD HD camera

Optimal image quality

- Outstanding image quality
- Menu by applications and user’s profiles
- On-Screen display menu
- Ergonomic design of camera head
- Camera head with 2 programmable buttons
- Control of peripheral devices
2 VIDEO CAMERAS

SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- On screen displayed adjustments
- Adjustable shutter area
- Automatic mechanical shutter (1/50 to 1/100 000)
- Backlight function for arthroscopy
- Electronic anti-moire filter for flexible endoscopes
- Video enhancement
- Modification of the red and the blue gain
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Menu per application
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 2 remote control outputs (Jack 2.5 and 3.5mm)
- Reset to manufacturer settings
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 2500 g
- 1 DVI-D high resolution SXGA output (1280*1024 pixels)
- 1 RGB-S video output (3x0.7Vcc & 0.3Vcc/75Ω)
- 1 Y/C video outputs (1 Vcc & 0.3 Vcc / 75Ω Sync Negative)
- 1 composite video outputs [1 Vcc / 75Ω]
- Power supply: (110-230 VAC ~ ; 50 - 60Hz)
- Power consumption: 45VA
- Two T 800 mA - 250 V fuses (Only fuses marked UR)
- Continuous Service

SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Scanning (624 lines/50HzPAL, 525 lines/60Hz) NTSC
- Sensor: 3 CCD 1/4" (4/3" format acquisition)
- C-Mount
- Resolution: 3 x (752 x 582) PAL ; 3 x (768 x 494) NTSC
- Definition: 1024 lines
- Sensitivity: 3 lux
- Ergonomic focus ring
- Free scope rotation and locking system
- 2 programmable buttons
- Signal / Noise ratio: 60 dB
- Size of the sensor: L = 80mm; Ø = 32 mm
- Weight of the sensor: 250 g
- Cable length: 3.60 meters
- Waterproof for cold disinfection*

REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
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<tbody>
<tr>
<td>S_368_9000</td>
<td>Digital HD 3CCD CCU, PAL, DVI output</td>
</tr>
<tr>
<td>S_368_9001</td>
<td>Digital HD 3CCD CCU, NTSC, DVI output</td>
</tr>
<tr>
<td>S_367_8000</td>
<td>Digital HD 3CCD camera head, C-mount, PAL</td>
</tr>
<tr>
<td>S_367_8001</td>
<td>Digital HD 3CCD camera head, C-mount, NTSC</td>
</tr>
<tr>
<td>S_367_0002</td>
<td>18mm HD coupler, C-mount, scope holder</td>
</tr>
<tr>
<td>S_367_0003</td>
<td>18mm HD coupler, C-mount, scope holder, with high torque focus ring</td>
</tr>
<tr>
<td>S_413024</td>
<td>16-34mm HD zoom coupler, C-mount, scope holder</td>
</tr>
</tbody>
</table>

* See user manual for more information
2 VIDEO CAMERAS

3CCD camera

The classic 3CCD model

- Impressive image quality
- Menu by applications and user’s profiles
- On-Screen display menu
- Ergonomic design of camera head
- Camera head with 2 programmable buttons
- Control of peripheral devices
VIDEO CAMERAS

SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- On screen displayed adjustments
- Adjustable shutter area
- Automatic electronic shutter (1/50 to 1/100 000)
- Backlight function for arthroscopy
- Electronic anti-moire filter for flexible endoscopes
- Video enhancement
- Modification of the red and the blue gain
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Menu per application
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 2 remote control outputs (Jack 2.5 and 3.5mm)
- Reset to manufacturer settings
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 2500 g
- 1 RGB-S video output (3x0.7Vcc & 0.3Vcc/75Ω)
- 1 Y/C video outputs (1 Vcc & 0.3 Vcc / 75Ω Sync Negative)
- 1 composite video outputs (1 Vcc / 75Ω)
- Power supply: (115-230 VAC ~ ; 50 - 60Hz)
- Power consumption : 45VA
- Two T 800 mA - 250 V fuses (Only fuses marked UR)
- Continuous Service

SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Scanning (624 lines/50Hz)PAL, (525 lines/60Hz)NTSC
- Sensor: 3 CCD 1/4"
- C-Mount
- Resolution: 3 x (752 x 582) PAL ; 3 x (768 x 494) NTSC
- Definition: 750 lines
- Ergonomic focus ring
- Free scope rotation and locking system
- 2 programmable buttons
- Sensitivity: 3 lux
- Signal / Noise ratio : 60 dB
- Silicone medical grade cable, no shape memory, easy to roll up, high resistance
- Size of the sensor: L = 80mm; Ø = 32 mm
- Weight of the sensor: 250 g
- Cable length: 3,60 meters
- Waterproof for cold disinfection*

REGULATORY & ENVIRONMENT

- Electrical safety : Class 1, BF type
- Comply with the European standard 93/42/EEC- Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

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<tr>
<td>S_367_9000</td>
<td>Digital 3CCD CCU, PAL,</td>
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<tr>
<td>S_367_9001</td>
<td>Digital 3CCD CCU, NTSC</td>
</tr>
<tr>
<td>S_367_8000</td>
<td>Digital HD 3CCD camera head, C-mount, PAL</td>
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<tr>
<td>S_367_8001</td>
<td>Digital HD 3CCD camera head, C-mount, NTSC</td>
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<td>S_413024</td>
<td>16-34mm HD Zoom coupler, C-mount, scope holder</td>
</tr>
</tbody>
</table>

* See user manual for more information
VIDEO CAMERAS

1 CCD camera

Performance and simplicity

- Available with regular and pendular sensor
- Compatible with rigid and flexible endoscopes
- Outstanding image quality
- Multidisciplinary
- Intuitive interface
- Direct computer link through USB to be used with Sopro Imaging medical software
**SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)**

- Automatic video settings detection mode
- Automatic white balance with technology
- Anti-moiré filter for flexible endoscopes
- Automatic electronic shutter (1/50 à 1/100 000)
- Video enhancement
- Intuitive menu with navigation wheel
- Menu by applications and user’s profile
- Modification of the red and the blue gain
- Adjustable shutter area
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Reset manufacturer settings
- Color bar generator
- Automatic saving of the adjusted parameters

**SPECIFICATIONS OF THE STANDARD CAMERA HEAD**

- Sensor: CCD 1/4'' high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Sensitivity: 2 lux
- Free scope rotation and locking system
- 2 fully programmable buttons (white balance, capture of images or videos, gamma, details, ...)

**SPECIFICATIONS OF THE PENDULAR CAMERA HEAD**

- Sensor: CCD 1/4'' high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Sensitivity: 2 lux
- 360° quick-lock system
- 1 fully programmable wheel

**REGULATORY & ENVIRONMENT**

- Electrical safety: Class 1, BF type
- Comply with the European standards 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -20°C / +40°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>S_184_9100</td>
<td>CCU PAL/NTSC, USB2 output, SIM software (trial version) - EU</td>
</tr>
<tr>
<td>S_184_9101</td>
<td>CCU PAL/NTSC, USB2 output, SIM software (trial version) - US</td>
</tr>
<tr>
<td>S_184_9102</td>
<td>CCU PAL/NTSC, USB2 output, SIM software (trial version), 2 SDI outputs - EU</td>
</tr>
<tr>
<td>S_184_9103</td>
<td>CCU PAL/NTSC, USB2 output, SIM software (trial version), 2 SDI outputs - US</td>
</tr>
<tr>
<td>S_184_8100</td>
<td>1CCD camera head, PAL, C-Mount</td>
</tr>
<tr>
<td>S_184_8101</td>
<td>1CCD camera head, NTSC, C-Mount</td>
</tr>
<tr>
<td>S_084_0001</td>
<td>18.5 mm coupler, C-Mount, scope holder</td>
</tr>
<tr>
<td>S_084_0007</td>
<td>13mm coupler, C-Mount, scope holder</td>
</tr>
<tr>
<td>See us</td>
<td>1CCD pendular camera head, PAL or NTSC, 12.3 or 15 mm integrated coupler</td>
</tr>
</tbody>
</table>

* See user manual for more information
The perfect match between light and image

- Fully automatic
- Great image quality
- User-friendly
- Smart and automated functions thanks to technology
- Compatible with both rigid and flexible endoscopes
- Eco-friendly and powerful LED light source

1 CCD camera
with 120 W* LED light source

*equivalent to 120 Watts Xenon light Source
2 VIDEO CAMERAS

SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Automatic video settings detection
- Automatic electronic shutter (1/50 à 1/100 000)
- Video enhancement
- Electronic anti-moire filter for flexible endoscopes
- White balance with \(I_{ce}\) feature
- Continuous service

SPECIFICATIONS OF THE LIGHT SOURCE

- LED technology
- Light intensity of a 120W Xenon light source
- LED lifetime: up to 50 000 hours
- Color temperature: \(\geq 4 500° K\)

SPECIFICATIONS OF THE CAMERA HEAD

- Sensor: CCD 1/4” high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Definition: 500 lines
- Sensitivity: 2 lux
- Signal / noise ratio: 52 dB
- Ergonomic focus ring
- Free scope rotation and locking system
- C-mount
- 2 ergonomic buttons
- Waterproof for cold disinfection
- Dimensions: L: 87 mm ; Ø: 30 mm
- Weight: 210 g
- Cable length: 3 meters

GENERAL SPECIFICATIONS

- Dimensions (W x H x D): 300 x 66 x 300 mm
- Weight: 2400 g
- 1 Y/C video output (1 Vcc & 0.3 Vcc / 75Ω Sync Negative)
- 1 composite video output (1 Vcc / 75Ω)
- Power supply: (100-230 VAC ~ ; 50/60 Hz)
- Power consumption: 86 VA
- Two T 800 mA - 250 V fuses (only fu marked UL)
- Safety: Class 1, BF type applied part

REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -20°C / +40°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N° Description
S_K16_1000 Pack DUO with CCU + PAL sensor + 18.5mm coupler
S_K16_1001 Pack DUO with CCU + NTSC sensor + 18.5mm coupler
S_K16_1009 Pack DUO with CCU + PAL sensor + 13mm coupler
S_084_0007 13mm coupler, C-Mount, scope holder
402046 Olympus light source adapter for DUO by Sopro

Technical data subject to modification, revision and improvement without notice
2 VIDEO CAMERAS

1CCD USB camera

The best USB solution

- Digital image quality
- User-friendly
- Smart and automated functions thanks to ICE technology
- Compatible with both rigid and flexible endoscopes
- Direct USB2.0 link
### Specifications of the USB Camera Head

- Sensor: CCD 1/4” high sensitivity
- Automatic video setting detection
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Definition: 470 lines
- Sensitivity: 2 lux
- Signal/Noise Ratio: 52 dB
- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Automatic white balance
- Video enhancement
- Modification of the video parameters
- Automatic saving of the adjusted parameters
- Electronic anti-moire filter for flexible endoscopes
- 2 programmable buttons allowing: Freeze, record, white balance, anti-moire filter activation
- Immersible USB connector
- Virtual Camera Control Unit: (Automatic White Balance, video parameters, Flexible or rigid applications, Shortcuts)
- Automatic detection of the colour temperature according to the used light source
- Size of the sensor: L = 87 mm, Ø = 30 mm
- Weight of the sensor: 210 g
- Cable length: 3 meters
- 1 USB 2.0 output
- Power supply: 5 V DC
- Power consumption: 2.5 VA
- Waterproof for cold disinfection
- Automatic saving of the adjusted parameters
- Electronic anti-moire filter for flexible endoscopes
- 2 programmable buttons allowing: Freeze, record, white balance, anti-moire filter activation

### Recommended Computer Configuration for Sopro Imaging Software

- Operating system: Windows 7
- Processor: Intel Core2
- RAM: 2 Gb
- Hard disk: 1 Tb
- USB ports: 4 USB 2.0 Hi-Speed ports
- Graphics Card: with NVIDIA or ATI chipset / 512 MB of unshared video RAM with support for DirectX 9 or higher
- USB chipset: Intel or NEC
- Screen Resolution: 1280 x 1024 or higher

### Regulatory & Environment

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +35°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_181_0011</td>
<td>UBICAM, USB2 stand alone solution, PAL, C-mount, SIM software (test version)</td>
</tr>
<tr>
<td>S_181_0015</td>
<td>UBICAM, USB2 stand alone solution, NTSC, C-mount, SIM software (test version)</td>
</tr>
<tr>
<td>S_084_0001</td>
<td>18.5mm coupler, C-mount, scope holder</td>
</tr>
<tr>
<td>505026</td>
<td>Sopro Imaging Medical license</td>
</tr>
<tr>
<td>S_K10_2006</td>
<td>UBICAM PLUS PAL: Ubicam + coupler + one licence of Sopro Imaging Medical software</td>
</tr>
<tr>
<td>S_K10_2007</td>
<td>UBICAM PLUS NTSC: Ubicam + coupler + one licence of Sopro Imaging Medical software</td>
</tr>
</tbody>
</table>

* see user manual for more information
2 VIDEO CAMERAS

Full consulting room pack

UBIPACK ENT
UBIPACK GYN

UBICAM

UBilight

SOPRU imaging

A unique concept

- All in one package designed for consulting room
- Outstanding image quality
- Easy to use
- Powerful imaging software
- Better communication with patients
### Video Cameras

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_K10 2000</td>
<td>UBIPACK GYN PAL</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ Hysteroscope 2,7 mm 30° + Hysteroscopy sheath 14,9Fr double rotative stopcock WK channel 5Fr</td>
</tr>
<tr>
<td>S_K10 2002</td>
<td>UBIPACK GYN NTSC</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ Hysteroscope 2,7 mm 30° + Hysteroscopy sheath 14,9Fr double rotative stopcock WK channel 5Fr</td>
</tr>
<tr>
<td>S_K10 2001</td>
<td>UBIPACK GYN PAL</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ Hysteroscope 2,7 mm 30° + 10,5Fr diagnostic sheath</td>
</tr>
<tr>
<td>S_K10 2003</td>
<td>UBIPACK GYN NTSC</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ Hysteroscope 2,7 mm 30° + 10,5Fr diagnostic sheath</td>
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</table>

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
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<tr>
<td>S_K10 1000</td>
<td>UBIPACK ENT PAL</td>
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<tr>
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<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1001</td>
<td>UBIPACK ENT NTSC</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 0°</td>
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<tr>
<td>S_K10 1002</td>
<td>UBIPACK ENT PAL</td>
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<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
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<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 30°</td>
</tr>
<tr>
<td>S_K10 1003</td>
<td>UBIPACK ENT NTSC</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
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<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 30°</td>
</tr>
<tr>
<td>S_K10 1004</td>
<td>UBIPACK ENT PAL</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
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<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 45°</td>
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<tr>
<td>S_K10 1005</td>
<td>UBIPACK ENT NTSC</td>
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<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 45°</td>
</tr>
<tr>
<td>S_K10 1006</td>
<td>UBIPACK ENT PAL</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
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<td></td>
<td>+ light cable + sinuscope 4.0 mm 70°</td>
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<th>Description</th>
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<tr>
<td>S_K10 1007</td>
<td>UBIPACK ENT NTSC</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + sinuscope 4.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1008</td>
<td>UBIPACK ENT PAL</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + otoscope 4.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1009</td>
<td>UBIPACK ENT NTSC</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + otoscope 4.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1010</td>
<td>UBIPACK ENT PAL</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + otoscope 3.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1011</td>
<td>UBIPACK ENT NTSC</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td></td>
<td>+ light cable + otoscope 3.0 mm 0°</td>
</tr>
<tr>
<td>S_K10 1013</td>
<td>UBIPACK ENT</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ulyss - PAL</td>
</tr>
<tr>
<td></td>
<td>+ Ubilight + light cable + Ulyss</td>
</tr>
<tr>
<td>S_K10 1014</td>
<td>UBIPACK ENT</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ulyss - NTSC</td>
</tr>
<tr>
<td></td>
<td>+ Ubilight + light cable + Ulyss</td>
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</table>

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>S_K10 1015</td>
<td>UBIPACK PAL</td>
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<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
<tr>
<td>S_K10 1016</td>
<td>UBIPACK NTSC</td>
</tr>
<tr>
<td></td>
<td>Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable</td>
</tr>
</tbody>
</table>
# ACCESSORIES FOR VIDEO CAMERAS

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_097_0001</td>
<td>24mm HD coupler C-mount, scope holder with locking capacity for S_397 camera head weight: 60g waterproof</td>
</tr>
<tr>
<td>S_097_0002</td>
<td>24mm HD coupler C-mount, scope holder with locking capacity for S_397 camera head with high torque focus ring for Arthroscopy weight: 60g waterproof</td>
</tr>
<tr>
<td>S_067_0004</td>
<td>22mm coupler C-mount, scope holder with locking capacity, for S_169 &amp; S_162 camera heads weight: 44g waterproof</td>
</tr>
<tr>
<td>S_067_0002</td>
<td>22mm coupler C-mount, scope holder with locking capacity, for S_169 &amp; S_162 camera heads with high torque focus ring for Arthroscopy weight: 44g waterproof</td>
</tr>
<tr>
<td>S_367_0002</td>
<td>18mm HD coupler C-mount, scope holder with locking capacity, for S_367 &amp; S_368 camera heads weight: 54g waterproof</td>
</tr>
<tr>
<td>S_367_0003</td>
<td>18mm HD coupler C-mount, scope holder with locking capacity, for S_367 &amp; S_368 camera heads with high torque focus ring for Arthroscopy weight: 54g waterproof</td>
</tr>
<tr>
<td>S_084_0001</td>
<td>18.5mm coupler C-mount, scope holder with locking capacity for S_165 &amp; S_184 camera heads weight: 20g waterproof</td>
</tr>
<tr>
<td>S_084_0007</td>
<td>13mm coupler C-mount, scope holder with locking capacity for S_165 &amp; S_184 camera heads weight: 20g waterproof</td>
</tr>
</tbody>
</table>
## ACCESSORIES FOR VIDEO CAMERAS

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_701004</td>
<td>18mm Beamsplitter 90° C-mount, 360° rotatable head with locking capacity, without eyepiece, for S_397 camera head waterproof</td>
</tr>
<tr>
<td>S_413024</td>
<td>16-34mm HD Zoom coupler C-mount, scope holder for all camera heads waterproof</td>
</tr>
<tr>
<td>700145</td>
<td>USB2 Amplifier 5 meters long for S_181</td>
</tr>
<tr>
<td>700206</td>
<td>Medical Keyboard soakable, QWERTY, PS2, for S_397 video camera &amp; USB300/200 archiving systems</td>
</tr>
<tr>
<td>302027</td>
<td>Storz/Olympus Adapter for Flexible Scopes</td>
</tr>
<tr>
<td>302032</td>
<td>Pentax Adapter for Flexible Scopes</td>
</tr>
<tr>
<td>302030</td>
<td>Fujinon Adapter for Flexible Scopes</td>
</tr>
</tbody>
</table>
## Accessories for Video Cameras

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>009002</td>
<td>Footswitch for S_162 with USB2 output (jack connector)</td>
</tr>
<tr>
<td>009009</td>
<td>USB footswitch for Sopro Imaging Medical</td>
</tr>
<tr>
<td>700381</td>
<td>USB2 Amplifier (5m) for UBICAM</td>
</tr>
<tr>
<td>002158</td>
<td>Small USB extension (0.8m) for UBICAM</td>
</tr>
<tr>
<td>S_397_1000</td>
<td>Communication kit for SOPRO 397 and SOPRO 640 (30 &amp; 45L)</td>
</tr>
<tr>
<td>700337</td>
<td>Jack-USB adaptor for S_184 camera and Sopro Imaging Software</td>
</tr>
</tbody>
</table>

2 Video cameras

- 30 -
3 LIGHT SOURCES

SIRIUS, LED light source ..................................................... p34
SOPRO 230, 218 and 210 Xenon light sources ..................... p36
SOPRO 284 180W LED light source .................................... p38
SOPRO 281 100W LED light source ................................... p40
Light sources accessories .................................................... p42
Light cables ..................................................................... p42
Light cables accessories ..................................................... p43
3 LIGHT SOURCES

Simply powerful

- Latest LED generation for a powerful light in any applications under any circumstances
- Automatic adjustment of light intensity according to your clinic
- Remote controlled from ORION camera head
- Noiseless and ecofriendly
3 LIGHT SOURCES

SPECIFICATIONS

- LED technology
- LED lifetime: up to 40,000 h
- Color temperature: 6000°K
- Light intensity of a 300W Xenon light source
- Automatic adjustment of the light intensity
- Anti-blooming feature with light cable detection
- Standby mode
- Electronic iris
- Service menu with key information
- Automatic over temperature protection
- 7” 16/9 touchscreen with intuitive interface
- Compatible with Storz and Olympus type light cables
- Dimensions (W x H x D): 310 x 136 x 385 mm
- Weight: 5000 g
- Power consumption: 160 VA
- Power supply: (90-230 VAC~; 50-60Hz)

REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, CF type
- Comply with the European standard 93/42/EEC - Class IIa.
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
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<tbody>
<tr>
<td>S_298_0001</td>
<td>SIRIUS LED light source, EU</td>
</tr>
<tr>
<td>S_298_0002</td>
<td>SIRIUS LED light source, US</td>
</tr>
<tr>
<td>S_K30_1000</td>
<td>Pack Symbioz, EU (Including ORION*, SIRIUS and VEGA)</td>
</tr>
<tr>
<td>S_K30_1001</td>
<td>Pack Symbioz, US (Including ORION*, SIRIUS and VEGA)</td>
</tr>
</tbody>
</table>

* With Full HD recorder
3 LIGHT SOURCES

Xenon light sources

High intensity light sources

- Anti blooming system with light cable detection
- Display of light intensity (0-100%) and age of the bulb
- Infrared filter protection for light cable
LIGHT SOURCES

COMMON SPECIFICATIONS

- Antiblooming system with light cable detection
- Light intensity adjustment with touch buttons
- Light intensity and bulb age displayed on LCD screen
- Stand-by button (Mechanical iris)
- Easy access to the bulb
- Infrared filter: the light cable can stay in the light source without any risk of over-heating
- Bulb lifetime: 500 hours
- Dimensions: D: 300mm; W: 311mm; H: 125 mm
- Weight: 5 kg
- Power supply: 110 - 230 VAC ~ / 50 - 60 Hz
- 2 Fuses T 4A. (UL/CSA only)
- Continuous service

DEDICATED SPECIFICATIONS

<table>
<thead>
<tr>
<th>Sopro 230</th>
<th>Sopro 218</th>
<th>Sopro 210</th>
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<tbody>
<tr>
<td>Nominal operating power</td>
<td>300W</td>
<td>180W</td>
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<tr>
<td>Color T°</td>
<td>6200°K</td>
<td>5800°K</td>
</tr>
<tr>
<td>Power consumption</td>
<td>485VA</td>
<td>450VA</td>
</tr>
</tbody>
</table>

REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, CF type
- Comply with the European standard 93/42/EEC - Class IIa.
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
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<tr>
<td>S_230_0002</td>
<td>300 Watts, EU Power Cord - Storz® adapter</td>
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<tr>
<td>S_230_0007</td>
<td>300 Watts, EU Power Cord - Olympus® adapter</td>
</tr>
<tr>
<td>S_230_0005</td>
<td>300 Watts, US Power Cord - Storz adapter</td>
</tr>
<tr>
<td>S_230_0009</td>
<td>300 Watts, US Power Cord - Olympus adapter</td>
</tr>
<tr>
<td>S_218_0007</td>
<td>180 Watts, EU Power Cord - Storz adapter</td>
</tr>
<tr>
<td>S_218_0010</td>
<td>180 Watts, EU Power Cord - Olympus adapter</td>
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<tr>
<td>S_218_0006</td>
<td>180 Watts, US Power Cord - Storz adapter</td>
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<td>S_218_0011</td>
<td>180 Watts, US Power Cord - Olympus adapter</td>
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<td>S_210_0003</td>
<td>100 Watts, EU Power Cord - Storz adapter</td>
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<tr>
<td>S_210_0004</td>
<td>100 Watts, EU Power Cord - Olympus adapter</td>
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<tr>
<td>S_210_0002</td>
<td>100 Watts, US Power Cord - Storz adapter</td>
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<td>S_210_0006</td>
<td>100 Watts, US Power Cord - Olympus adapter</td>
</tr>
<tr>
<td>See us</td>
<td>300, 180 and 100W, EU or US power cords, Wolf® adapter</td>
</tr>
</tbody>
</table>
3 LIGHT SOURCES

180W* LED light source

Brighten your world!

- As powerful as a 180W Xenon light source
- LED lifespan up to 50,000 hours
- Daylight color temperature** for optimum contrast
- OLED data display

*equivalent to 180 Watts Xenon light Source
**6500°K
**3 LIGHT SOURCES**

### SPECIFICATIONS

- LED technology
- Light intensity of a 180W Xenon light source
- Color temperature: 6 500°K
- LED lifetime: up to 50,000h
- Intuitive adjustment of the light intensity
- Light intensity memory
- Anti-blooming feature with light cable detection
- Standby mode
- Electronic iris
- Automatic over temperature protection
- 2.7” OLED screen
- Size (D x W x H): 300 x 300 x 66 mm
- Weight: 3 000 g
- Power consumption: 140 VA
- Input voltage: 100-230 VAC / 50-60 Hz
- Compatible with Storz type light cables (Olympus in option)
- Continuous service

### REGULATORY & ENVIRONMENT

- Electrical protection: Class I, CF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

---

Comparison of homogeneity of light between a Xenon (1) and the Sopro 284 LED (2) light source

<table>
<thead>
<tr>
<th>Art.Nº</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_284_0001</td>
<td>LED light source (light intensity of a 180W Xenon light source) - EU power cord - Storz type</td>
</tr>
<tr>
<td>S_284_0002</td>
<td>LED light source (light intensity of a 180W Xenon light source) - US power cord - Storz type</td>
</tr>
<tr>
<td>S_284_0003</td>
<td>LED light source (light intensity of a 180W Xenon light source) - EU power cord - Olympus type</td>
</tr>
<tr>
<td>S_284_0004</td>
<td>LED light source (light intensity of a 180W Xenon light source) - US power cord - Olympus type</td>
</tr>
</tbody>
</table>
3 LIGHT SOURCES

100W* LED light source

Designed for consulting room

- Well designed and compact
- Accurate colors depiction
- Uniform light
- LED lifespan up to 50 000 hours

*equivalent to 100 Watts Xenon light Source
### SPECIFICATIONS

- LED technology
- Light intensity of a 100W Xenon light source
- LED lifetime: 50,000 hours (in advised conditions of use)
- Color temperature: > to 4500°K
- Light cable input: Storz only
- Standby mode with light intensity memory
- Antiblooming system with light cable detection
- Automatic over temperature protection
- Low heat generation
- Manual adjustment of the light intensity
- Dimensions: D: 180mm; W: 95mm; H: 35mm
- Weight: 320g
- Power supply: 100 - 240 VAC ~ / 50 - 60 Hz
- Power consumption: 30 VA
- Transformer: 12V DC
- Continuous service
- Electrical protection: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

### REGULATORY & ENVIRONMENT

- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_281_0001</td>
<td>LED light source with external transformer</td>
</tr>
<tr>
<td>402046</td>
<td>Olympus connector for S_281 LED light source</td>
</tr>
</tbody>
</table>
3 LIGHT SOURCES

ACCESSORIES FOR LIGHT SOURCES

Replacement Bulbs

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>006003</td>
<td>300W Xenon bulb</td>
</tr>
<tr>
<td>006005</td>
<td>180W Xenon bulb</td>
</tr>
</tbody>
</table>

Light Cables

- Compatible with all light sources and autoclavable at 134°
- Reinforced sheath
- Universal model delivered without connector

<table>
<thead>
<tr>
<th>Ø</th>
<th>L</th>
<th>Art.-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.8mm</td>
<td>3</td>
<td>S_700382</td>
</tr>
<tr>
<td></td>
<td>2.3</td>
<td>S_700384</td>
</tr>
<tr>
<td>3.5*</td>
<td>3</td>
<td>S_700216</td>
</tr>
<tr>
<td></td>
<td>2.3</td>
<td>S_700215</td>
</tr>
</tbody>
</table>

*For scope diameter <4mm

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700602</td>
<td>90° connector Eases the use of the camera and the light cable together</td>
</tr>
<tr>
<td></td>
<td>Prevents damages to the light cable</td>
</tr>
</tbody>
</table>
# 3 LIGHT SOURCES

## ACCESSORIES FOR LIGHT SOURCES

### Endoscope side connectors

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700051</td>
<td>Storz/Olympus</td>
</tr>
</tbody>
</table>

### Light source side connectors

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700044</td>
<td>Storz</td>
</tr>
<tr>
<td>700045</td>
<td>Olympus</td>
</tr>
<tr>
<td>700046</td>
<td>Wolf/S&amp;N</td>
</tr>
<tr>
<td>700047</td>
<td>Acmi/Stryker</td>
</tr>
</tbody>
</table>
4 INSUFFLATORS

VEGA - 45L insufflator ....................................................... p46
SOPRO 640 - 45L, 30L and 20L insufflators......................... p48
Accessories ....................................................................... p50
Security for the patient is the key word of this new generation

- Powerful to keep the pneumoperitoneum inflated under any conditions
- Automatic flow rate adjustment to keep set pressure
- CO2 available directly displayed in minutes*
- External relief valve against cross contamination

* Patented feature
**INSUFFLATORS**

**SPECIFICATIONS**
- Maximum flow: 45L/min in high flow mode – 2L/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy feature: Displays in minutes the remaining time of insufflation
- Set cavity pressure: From 0 to 24 mmHg (accuracy of 1 mmHg)
- 7” 16/9 touchscreen with intuitive interface
- Clear messages displayed both on touchscreen and main monitor
- External desufflation valve for over pressure to avoid cross contamination
- External control from Orion camera head
- Purge feature
- Smooth design for easy disinfection
- Automatic low flow/high flow switching (option)
- Specific setting for Bariatric surgery
- Automatic calibration of the device
- Real time display of bottle pressure or central CO2 supply pressure
- Internal pre heating system
- CO2 gaz bottle compatible (max. 60bars)
- CO2 central gaz supply compatible (3.5 to 4bars)
- Disposable or reusable tubings
- Dimensions (W x H x D): 310 x 136 x 385 mm
- Weight: 8000 g
- Power supply: (90-230 VAC~ / 50-60Hz)
- Power consumption: 75 VA

**REGULATORY & ENVIRONMENT**
- Electrical safety: Class 1
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75% 
- Transport and storage Temperature range: -10°C / +45°C

**Art.N°**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_698_0001  VEGA 45L/min insufflator, EU</td>
</tr>
<tr>
<td>S_698_0002  VEGA 45L/min insufflator, US</td>
</tr>
<tr>
<td>S_K30_1000  Pack Symbioz, EU (Including ORION*, SIRIUS and VEGA)</td>
</tr>
<tr>
<td>S_K30_1001  Pack Symbioz, US (Including ORION*, SIRIUS and VEGA)</td>
</tr>
</tbody>
</table>

*With Full HD recorder*
The best option on the market for safer surgery

- Management of the insufflator from the camera head
- Feedback of key data on the monitor
- Display of the remaining time before the end of the CO2 bottle
- Enhanced security with no loss of pressure, no cross contamination and no risk of mis programming
**COMMON SPECIFICATIONS**

- Maximum flow: 45 l/min in high flow mode - 2 l/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy function; display in real time the remaining time of insufflation
- Blow-off pressure: 0 to 24 mmHg (accuracy of 1 mmHg)
- Clear messages displayed with sound alarms
- External desufflation valve for over pressure to avoid cross contamination
- 5 languages (French, Italian, Spanish, English, German)
- Option of automatic low/high flow switching
- 5.7-inch LCD screen showing: immediate flow, intra-cavity pressure, blow-off pressure, total volume of CO2 used, chronometer
- Automatic calibration of the device

- Real time display of bottle pressure or central gas supply pressure
- Internal pre heating system
- Thumbwheel navigation and validation system
- CO2 gas bottle compatible (max 70 bars)
- CO2 central gas supply compatible (max 7 bar)
- Open-ended spanner intended for CO2 high-pressure hose connector
- Disposable or reusable tubings
- Dimensions: L=300mm, D=340mm, H=145mm
- Weight: 5 kg
- Main power cable
- Power supply: 110 - 230 VAC ~ / 50 - 60 Hz
- Power consumption: 40VA
- 2 x 2.5 AT - 250V time-lag fuses - UR
- Continuous Service

**DEDICATED SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Maximum flow</th>
<th>45L/min</th>
<th>30L/min</th>
<th>20L/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 bottle purge</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Clear messages</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Preventive maintenance message</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bottle &amp; wall supply</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Autonomy feature</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>External control via SORO 397 camera head</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**REGULATORY & ENVIRONMENT**

- Electrical safety : Class 1
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_640_4002</td>
<td>45 L - EU Power Cord - with autonomy feature</td>
</tr>
<tr>
<td>S_640_4004</td>
<td>45 L - US Power Cord - with autonomy feature</td>
</tr>
<tr>
<td>S_640_3005</td>
<td>30 L - EU Power Cord - with autonomy feature</td>
</tr>
<tr>
<td>S_640_3008</td>
<td>30 L - US Power Cord - with autonomy feature</td>
</tr>
<tr>
<td>S_640_2002</td>
<td>20 L - EU Power Cord</td>
</tr>
<tr>
<td>S_640_2004</td>
<td>20 L - US Power Cord</td>
</tr>
<tr>
<td>Art.-No.</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>017036L</td>
<td>Flexible hose for high pressure bottle (60bars) US-DIN 477-1, n°6, 1 meter FOR EUROPE</td>
</tr>
<tr>
<td>017037L</td>
<td>Flexible hose for high pressure bottle (60bars) US- UNF 7/16&quot; US, 1 meter FOR USA</td>
</tr>
<tr>
<td>S_391 000 023</td>
<td>Flexible hose for high pressure bottle (60bars) US- IT (ISO5145), 1 meter FOR ITALY</td>
</tr>
<tr>
<td>017036L</td>
<td>Central gas supply hoses (Max 7 bars) Contact us for more details</td>
</tr>
</tbody>
</table>

**Accessories**

- **Art.-No.**
- **Description**
  - 607103L: Sterile single use insufflation tubing made of PVC including sterile viral CO2 filter 0,027l delivered by pack of 20 pieces
  - 607043L: Reusable insufflation tubing autoclavable
  - 016006L: Sterile viral CO2 filter single use, 0,027l delivered by pack of 50 pieces
  - 607043L: Reusable insufflation tubing autoclavable

**CO2 Connections**

- **Art.-No.**
- **Description**
  - 017036L: Flexible hose for high pressure bottle (60bars) US-DIN 477-1, n°6, 1 meter FOR EUROPE
  - 017037L: Flexible hose for high pressure bottle (60bars) US- UNF 7/16" US, 1 meter FOR USA
  - S_391 000 023: Flexible hose for high pressure bottle (60bars) US- IT (ISO5145), 1 meter FOR ITALY

**CO2 Bottle Connections**

- **Art.-No.**
- **Description**
  - 017023: Pin Index connection for DIN 477-1 n°6
  - 017034: Flexible hose for high pressure bottle (60bars) US- IT (ISO5145), 1 meter FOR ITALY
5 FLUID MANAGEMENT

SOPRO 670 - Irrigation and suction pump for Arthroscopy ...... p54
SOPRO 672 - Irrigation pump for Gynecology.................. p56
SOPRO 673 - Irrigation and suction pump for Laparoscopy...... p58
5 FLUID MANAGEMENT

Irrigation and suction pump for arthroscopy

The perfect fluid management device

- Irrigation and suction flow management
- Quick leakages compensation
- Intuitive navigation system with wide LCD interface and thumbwheel
- Pneumatic foot remote control
- Noiseless
5 FLUID MANAGEMENT

SPECIFICATIONS

- Maximum pressure (accuracy 5 mmHg): 120 mmHg
- Automatic management of the flow rate
- Irrigation flow management from 0 to 1.5L/mn
- Suction flow management from 0 to 100%
- Compact suction management system
- Noiseless
- Automatic Canula selection
- Flush function with foot remote control
- Quick compensation of leakages
- Automatic overpressure release system
- 5”7 LCD screen
- Browser system and validation by knob
- Visual and sound alarms
- Pneumatic foot pedal
- Dimensions: L=300mm, D=340mm, H=145mm
- Weight: 8 Kg
- Power supply: (100 - 230 VAC ~ / 50 - 60 Hz)
- Power consumption: 80VA
- Protection by fuse: 2 x 2.5 A Temporised fuses - 250V - UR
- Continuous service
- 5" LCD screen
- Browser system and validation by knob
- Visual and sound alarms
- Pneumatic foot pedal
- Dimensions: L=300mm, D=340mm, H=145mm
- Weight: 8 Kg
- Power supply: (100 - 230 VAC ~ / 50 - 60 Hz)
- Power consumption: 80VA
- Protection by fuse: 2 x 2.5 A Temporised fuses - 250V - UR
- Continuous service

REGULATORY & ENVIRONMENT

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC - Class Ila
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -10° C / +40° C
- Transport and storage Relative Humidity range: 10 to 100 %
- Operating, Transport and Storage Atmospheric pressure range: 500 hPa to 1,060 hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_670_0001</td>
<td>Irrigation and suction pump for arthroscopy - EU Power Cord</td>
</tr>
<tr>
<td>S_670_0002</td>
<td>Irrigation and suction pump for arthroscopy - US Power Cord</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>Art.No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_670_003</td>
<td>Sterile single use irrigation / suction tubing set (15 pieces)</td>
</tr>
<tr>
<td>009007</td>
<td>Pneumatic remote control</td>
</tr>
<tr>
<td>700268</td>
<td>Lagoon 250, suction regulator 0 to -200mbar (0 to -150mmHg), maximum flow 20l/min, NF connection, autoclavable 134°C</td>
</tr>
<tr>
<td>700269</td>
<td>Bacteriological filters (100 pieces)</td>
</tr>
</tbody>
</table>
Automatic pressure and flow control for optimal view during uterus dilatation
Fluid balance to reduce intravasation risk*
Permanent intra-uterine pressure monitoring
Short learning curve

*optional
**SPECIFICATIONS**

- Pressure range: 15-150 mm Hg
- Flow range: 30-500 ml/min
- High pressure safety: 200 mm Hg
- Power supply: 100-250 V~/50-60Hz
- Max. power consumption: 45 VA
- Max. current consumption: 100 V/60 Hz: 289 mA
- 110 V/60 Hz: 310 mA
- 240 V/50 Hz: 190 mA
- Classifications: Protection Class I, Type BF, IP 41
- Dimensions (w x h x d): 265 x 137 x 390 mm
- Weight: approx. 4 kg

**REGULATORY & ENVIRONMENT**

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.Nº</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_672_0001</td>
<td>Irrigation pump for Gynecology - EU power cord</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700402</td>
<td>Reusable Tube set, 20 uses (10 pcs)</td>
</tr>
<tr>
<td>700401L</td>
<td>Sterile Tube set with Luer Lock connection, disposable (10 pcs)</td>
</tr>
<tr>
<td>700403L</td>
<td>Sterile Tube set with safe Lock connection, disposable (10 pcs)</td>
</tr>
<tr>
<td>700404L</td>
<td>Tube set for outflow, disposable (10 pcs)</td>
</tr>
<tr>
<td>700405</td>
<td>Bottle scale, (for fluid balance)</td>
</tr>
<tr>
<td>700425</td>
<td>Bemis container 3L, (2 pcs)</td>
</tr>
</tbody>
</table>
5 FLUID MANAGEMENT

Irrigation and suction pump for laparoscopy

Simple and accurate

- Simple and intuitive use
- Easy loading of the tubing
- High safety through a specific pressure control
- Suction for liquid and/or gas included
- Noiseless
FLUID MANAGEMENT

SPECIFICATIONS

- Max. flow rate irrigation: 1.8 l/min
- Max flow rate suction: 1.8 l/min
- Max pump capacity: 400 mmHg
- Suction: Between -50 kpa and -60 kpa
- Suction noise level: 57 dB(A)
- Power supply: 100-240V~/50-60Hz
- Main fuse: T 0.5 A – T10 A slow blow, IEC 127/UL recognized
- Max. power consumption: 55 VA
- Max. current: 100V: 500 mA
  115V: 440 mA
  230V: 230 mA
- Safety: Manufactured and tested acc. to EN 60601-1/IEC 60601-1, EMC: EN 60601-1-2 / IEC 60601-1-2
- Dimensions (w x h x d): 280 x 137 x 408 mm
- Weight: approx. 5.9 kgs

REGULATORY & ENVIRONMENT

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- Transport and storage Relative Humidity range: 10 to 100 %
- Operating, Transport and Storage Atmospheric pressure range: 500 hPa to 1,060 hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_673_0001</td>
<td>Irrigation and suction pump for laparoscopy</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700401L</td>
<td>Sterile tube set with luer lock connection disposable (10 pces)</td>
</tr>
<tr>
<td>700403L</td>
<td>Sterile tube set with safe lock connection disposable (10 pces)</td>
</tr>
<tr>
<td>700402</td>
<td>Reusable tube set 20 uses</td>
</tr>
<tr>
<td>700421</td>
<td>Tube set suction, reusable 20 uses</td>
</tr>
<tr>
<td>700422</td>
<td>Tube set vacuum, reusable 20 uses</td>
</tr>
<tr>
<td>700423L</td>
<td>Hydrophobic filter</td>
</tr>
<tr>
<td>700425</td>
<td>Bemis container, (2 pces)</td>
</tr>
<tr>
<td>700424</td>
<td>Coil of wire for Bemis container</td>
</tr>
</tbody>
</table>
Operating room ................................................................. p62
  PANASONIC® 26” FULL HD medical grade surgical display
  BARCO® 19” HD medical grade surgical display

Consulting room .............................................................. p64
  NEOVO® 22” FULL HD diagnostic display

Accessories ........................................................................ p65
PANASONIC 26” FULL HD medical grade surgical display

- Full HD widescreen
- High quality colors and accurate image reproduction
- Multi HD inputs/outputs
- Ergonomic and hygienic design optimized for operating room use

SPECIFICATIONS
- Viewing area (diagonal): 26” - TFT AM LCD technology
- Resolution (H x W): 1920 x 1080
- Luminance: 500 cd/m²
- Contrast ratio: 1400:1
- Response speed: 8ms
- Video inputs: 2 x DVI-D, 1 x HD-SDI, 1 x RGB, 1 x S-video, 1 x Comp.
- Video outputs: 1 x DVI-D, 1 x HD-SDI, 1 x RGB, 1 x S-video, 1 x Comp.
- OSD language: English / Spanish / Italian / German / French / Japanese
- Weight: 7.7 kg

REGULATORY
- Electrical safety: Class 1
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1-1, 60601-1-2, CCC, FCC-B, CAN/CSA, ICES-001, VCCI Class B

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_700427</td>
<td>Panasonic 26” Full HD medical grade surgical display</td>
</tr>
</tbody>
</table>
BARCO 19’’ HD medical grade surgical display

- High-grade image quality
- Optimum viewing comfort
- Easy cleaning and disinfection

SPECIFICATIONS

- Viewing area (diagonal): 19” – TFT AM LCD technology
- Resolution (H x W): 1280 x 1024
- Aspect ratio: 5:4
- Luminance: 280 cd/m²
- Contrast ratio: 600:1
- Response speed: 14ms
- Video inputs
- Video outputs
- OSD language: English/Spanish/German/French
- Weight: 8.6 kg

REGULATORY & ENVIRONMENT

- Electrical safety: Class 1
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1-1, 60601-1-2, CCC, FCC-B P CAN/CSA, ICES-001, VCCI Class B

<table>
<thead>
<tr>
<th>Art. N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_700056</td>
<td>Barco 19” HD medical grade surgical display</td>
</tr>
</tbody>
</table>
NEOVO 22'' Full HD diagnostic display

- Full HD resolution
- Eco smart sensor for low power consumption
- Built-in speakers
- Highly resistant optical glass

SPECIFICATIONS

- Panel Type: TFT LCD
- Max. Resolution: SXGA 1280 x 1024
- Pixel Pitch: 0.294mm
- Brightness: 250cd/m² (Typical)
- Contrast Ratio: 600:1 (Typical)
- Viewing Angle: (H/V) 140°/130° (Typical)
- Input Analog: 15-Pin D-Sub
- Digital: 29-Pin DVI-D
- S-Video: 4-Pin Mini Din S-Video
- CVBS: CVBS Jack
- Connector Power: 3-Pin AC Plug
- Thickness: 3.0mm (0.18”)
- Reflection Rate: <1%
- Transmission Rate: >96%
- Power: AC 100 – 240V, 50 – 60Hz
- Consumption <48W (On) <4W (Stand-by) <2W (Off)
- Dimensions: (W x H x D) 444 x 419 x 175mm
- Weight: 7.9Kg

REGULATORY

- Safety & EMI: FCC, UL/CSA, EPA,
- TUV/BAURÜT, CE, TCO 95,
- BSMI, ISO 13406-2, GOST

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<tr>
<th>Art.N°</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>S_700545</td>
<td>Neovo 22'' Full HD diagnostic display</td>
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</table>
## ACCESSORIES

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>700057</td>
<td>Desktop stand for 19” Barco monitor with VESA mounting</td>
</tr>
<tr>
<td>700311</td>
<td>Protection glass for 19” Barco monitor</td>
</tr>
<tr>
<td>700320</td>
<td>Extension cable for 19” Barco monitor to be used with long arm medical cart</td>
</tr>
<tr>
<td>700376</td>
<td>Extension cable for 26” Panasonic monitor to be used with long arm medical cart</td>
</tr>
<tr>
<td>700577</td>
<td>Protection glass for 26” Panasonic monitor</td>
</tr>
</tbody>
</table>
7 ARGO COMMUNICATION SYSTEM
Technology at your fingertips!
Remote

- Control all connected device from one unique place
- Feedback of essential information from connected devices

Imaging

- Patient and doctor database management
- Full HD still images and video recordings
- Visualization and edition of recorded/imported media
- Reports edition and customization

Dicom

- Data recovery from hospital worklist
- Media export/import to or from the PACS
- Dicom viewer

Streaming

- Live video and information sharing from the operating room

SPECIFICATIONS

- Capacitive 22" MVA LCD touch screen
- Resolution : 1920 x 1080
- Contrast ratio : 3000:1
- Intel Core i7
- 8GB RAM
- 320 GB HDD
- Remote software included to remote control and get feedback from ORION, SIRIUS and VEGA
- Imaging software (option) to record Full HD images and video and manage a patient database
- DICOM software to export data to the PACS
- STREAMING software to send real time information and video on the network.

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>S_098_0001</td>
<td>ARGO - Intuitive communication system with REMOTE and IMAGING features</td>
</tr>
<tr>
<td>S_098_0003</td>
<td>DICOM option for ARGO</td>
</tr>
<tr>
<td>S_098_0004</td>
<td>STREAMING option for ARGO</td>
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</table>
USB medical recorders ...................................................... p72
DVD medical recorder ....................................................... p73
# ARCHIVING SYSTEMS

## Medical recorders

**USB medical recorders**

**USB 200**
Records videos and still images from standard medical video sources to a USB flash drive or a USB hard disk

- LCD monitor: 2.5”, color (for video confirmation only)
- Buttons: Sealed membrane, fluid resistant
- Video inputs: 1 x S-video, 1 x Comp
- Video outputs: 1 x S-video, 1 x Comp
- Video In/Out: PAL or NTSC formats
- Audio In/Out: Standard 3.5mm stereo phone jacks
- Footswitch: Hands-free capture - standard 3.5mm minijack
- Image formats: JPEG, TIFF, PNG, DICOM (upgrade required)
- Images sizes: 1024 x 768; 800 x 600; 640 x 480 pixels
- Video formats: MPEG2 (DVD quality)
- Medias: USB flash drives or external USB hard drive
- Dimensions: 240 x 200 x 63mm
- Weight: 1.7kg

**USB 300**
Records high definition videos and still images from medical video sources to internal hard drive, external USB drive or network drive

- LCD monitor: 2.5”, full color (for video confirmation only)
- Buttons: Sealed membrane, fluid resistant
- Video inputs: DVI, RGB (via adapter), HD-SDI, S-video, Comp
- Video outputs: DVI, RGB (via adapter)
- Footswitch: Hands-free capture - standard 3.5mm minijack
- Image formats: JPEG, TIFF, BMP, DICOM
- Networking: RJ45 / 10 / 100 / 1000 Ethernet
- Internal storage: USB flash drive, USB hard drive, network drive
- Video formats: H.264 / MPEG (1080, 720, NTSC, PAL)
- Dimensions: 240 x 211 x 63mm
- Weight: 1.8kg

## REGULATORY

- CE 93/42/EEC
- UL 60601-1, IEC 60601-1, IEC 60601-1-2
- CSA C22.2 No.601.1, E 306417

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>S_700091</td>
<td>M-USB 200 for video and still images</td>
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<tr>
<td>009002</td>
<td>Foot remote control</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>S_700211</td>
<td>M-USB 300 for full HD video and still images</td>
</tr>
<tr>
<td>009002</td>
<td>Foot remote control</td>
</tr>
</tbody>
</table>
ARCHIVING SYSTEMS

Medical recorder

Medical grade DVD recorder

- User friendly recorder

SPECIFICATIONS

- Recording System: DVD Recording, NTSC/PAL Switchable
- Recording Format: Video: MPEG-2 compression
- Audio: Dolby Digital format
- Recordable Media: DVD+RW (2.4x and 4x speed)
- Recording Time: HQ Mode: 60 minutes
- Composite Input: BNC x2
- S-Video Input: 4-pin DIN x2, with loop-through
- Y/C input

- S-Video Output: 4-pin DIN x1
- Y/C output
- Remote Control: RS-232C x1, D-sub 9-pin
- Dimensions: 212 x 128.5 x 382 mm
- Weight: 6 kg
- Power supply: (110-230 VAC~, 50 -60Hz)
- Power Consumption: 35 W

REGULATORY & ENVIRONMENT

- Medical Standards: EN60601-1, EN60601-1-2, UL60601-1, CSA C22.2 No.60601.1

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<tr>
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<th>Description</th>
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<tr>
<td>S_700077</td>
<td>Medical DVD recorder</td>
</tr>
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</table>
IMAGING SOFTWARE
IMAGING SOFTWARE

Medical Imaging software

A powerful software

- A unique communication tool
- Dedicated to diagnosis aid and patient management
- Multi-languages format
- Sleek new design en enhanced ergonomics

RECOMMENDED COMPUTER CONFIGURATION

Windows® minimum configuration required
- Operating system: Windows XP Pro SP3
- Processor: Intel® Pentium IV – 1.3GHz
- RAM: 512MB
- Hard disk: 250GB
- USB ports: 2 USB2 Hi-Speed ports
- Graphic card: 32MB RAM unshared memory compatible DirectX 9
- USB Chipset: Intel® or NEC® / RENESAS®
- Screen resolution: 1024 x 768

Windows® recommended configuration
- Operating system: Windows 7 Pro SP1
- Processor: Intel Core 2
- RAM: 2GB
- Hard disk: 1TB
- USB ports: 4 USB2 Hi-Speed ports
- Graphic card: Chipset Nvidia® or ATI®
- 512MB unshared memory compatible DirectX 9
- USB Chipset: Intel or NEC / RENESAS
- Screen resolution: 1280 x 1024 or more

SOPRO IMAGING MEDICAL SOFTWARE

- Patient management
- Image and video recording and editing
- Image annotation and drawings
- Zoom
- Medical reports (Word, Pdf)
- Export your images and videos to DVD, USB, mail, ...
- Only once license required when connected to the network

<table>
<thead>
<tr>
<th>Art.N°</th>
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<tbody>
<tr>
<td>505026</td>
<td>Sopro Imaging Medical license</td>
</tr>
<tr>
<td>990145</td>
<td>CD-ROM: Sopro Imaging medical software</td>
</tr>
</tbody>
</table>
10 MEDICAL CARTS

Operating room ........................................... p80
  Premium carts
  Basic carts

Accessories ............................................... p82

Consulting room ....................................... p84
Premium carts

**Premium & short arm**
- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x Long arm on central pivot
- 1x Short arm on central pivot
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>700598</td>
<td>Premium cart with long and short arms</td>
</tr>
<tr>
<td>700624</td>
<td>Premium cart with long and short arms + transformer</td>
</tr>
</tbody>
</table>

**Premium**
- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x Long arm on central pivot
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

<table>
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<tr>
<th>Art.N°</th>
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</thead>
<tbody>
<tr>
<td>700597</td>
<td>Premium cart with long arm</td>
</tr>
<tr>
<td>700625</td>
<td>Premium cart with long arm + transformer</td>
</tr>
</tbody>
</table>
Basic carts

Basic & short arm

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x articulated short arm
- 1x Fixed mount for flat panel
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

<table>
<thead>
<tr>
<th>Art.N°</th>
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</tr>
</thead>
<tbody>
<tr>
<td>700596</td>
<td>Basic cart with fixed screen and short arm</td>
</tr>
<tr>
<td>700627</td>
<td>Basic cart with fixed screen and short arm + transformer</td>
</tr>
</tbody>
</table>

Basic

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x Fixed mount for flat panel
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

<table>
<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
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<tbody>
<tr>
<td>700595</td>
<td>Basic cart with fixed screen</td>
</tr>
<tr>
<td>700628</td>
<td>Basic cart with fixed screen + transformer</td>
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</tbody>
</table>
## Accessories

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700359</td>
<td>Pull out shelf for keyboard</td>
</tr>
<tr>
<td>700621</td>
<td>Camera holder (stainless steel)</td>
</tr>
<tr>
<td>700622</td>
<td>Cable hook (stainless steel)</td>
</tr>
<tr>
<td>700619</td>
<td>Bottle holder 140mm (rear side cart)</td>
</tr>
<tr>
<td>700317</td>
<td>Shelf (320x450)</td>
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</tbody>
</table>
# Accessories

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>700361</td>
<td>Foot switch panel for undercarriage</td>
</tr>
<tr>
<td>700618</td>
<td>Flexible scope holder</td>
</tr>
<tr>
<td>700617</td>
<td>Serum holder</td>
</tr>
<tr>
<td>700309</td>
<td>Power cord C13-C14 (60cm)</td>
</tr>
<tr>
<td>700616</td>
<td>EQP connection lead 60cm</td>
</tr>
</tbody>
</table>
Ubicart

- 1x 4 way Power strip
- 1x Serum holder
- 1x Camera holder
- 1x Light cable holder
- 1x Isolation transformer (option)

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<thead>
<tr>
<th>Art.N°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700362</td>
<td>UBICART including power strip, serum, camera and light cable holders.</td>
</tr>
<tr>
<td>700418</td>
<td>UBICART including power strip, serum, camera, light cable holders and isolation transformer</td>
</tr>
<tr>
<td>707039</td>
<td>Extra shelf (450 x 320 mm) for UBICART</td>
</tr>
</tbody>
</table>
EVERYWHERE

Worlwide centres to ease and fasten the service of our complete product line

ALWAYS

Dedicated to medical improvement for more than 40 years

AT YOUR SIDE

Direct and quick communication with our local sales force. National placed inventory to ensure quick delivery time

Dedicated to medical improvement for more than 40 years

Direct and quick communication with our local sales force. National placed inventory to ensure quick delivery time