

### OUR TECHNOLOGY YOUR SKILL



CAPITAL EQUIPMENT 2011



Our combined competences in medical endoscopy systems provide global solutions. From now on, SOPRO-COMEG forms the ideal leader with second-to-none "know-how": SOPRO in medical video imaging and COMEG in engineering endoscopy and micro lenses. Since many years, the product lines of SOPRO and COMEG have been setting the standards for image management systems with fully proven quality, efficiency, safety and convenience.

Our goal is to provide the safest and most advanced products and technologies that ensure reliable operating procedures and rapid recovery.

Synergy between our R&D Departments will result in products and systems that offer added clinical benefits and meet the requirements of patients, surgeons and the health care system even more effectively.

Engineers, mechanics, sales representatives... all our staff has one thing in common: their enthusiasm for hard work to serve our customers.

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French manufacturing plant **La Ciotat - FRANCE**Surface : 3 200 m<sup>2</sup>



German manufacturing plant **Tuttlingen - GERMANY** Surface : 2 600 m<sup>2</sup>



## I - COMPANY

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#### **Company history**



#### 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.



#### 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.



#### 2006

COMEG joins SOPRO

#### 2007

The plant's surface extends to 3200 m<sup>2</sup> in La Ciotat Introduction of a Spine surgery product line

#### 2009

Introduction of the Digilap Titanium, autoclavable videolaparoscope
Introduction of the SOPRO 397 3CCD Full HD camera
Introduction of UBICAM, USB consulting room camera and 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 UBILED, a new LED light source
Introduction of UBIPACK, the complete solution for gynecology and ENT

#### Products range at a glance

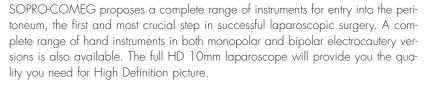


SOPRO-COMEG offers a complete range ranking from capital equipment to re-usable, high quality, durable instruments. Whatever your application is: Urology, Laparoscopy, Arthroscopy, Gynecology, Spine, ENT, SOPRO-COMEG will offer you the best solution and fulfil your needs.

#### **Capital equipment**

SOPRO-COMEG meets the needs of the surgeons and distributors by supplying the complete OR trolley. Our range includes video cameras ranking from 1 CCD to 3CCD Full HD, halogen, xenon and LED light sources, insufflators, pump, shaver, medical grade monitor and archiving systems. These products already met a large worldwide success with the unmatched image quality they offer.

#### Laparoscopy







#### 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, recectoscopy 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 interlamiar approach, by means of the endoscopic technique. The technique also qualifies for the effective treatment of chronic back-ailments caused by disc-prolaps 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.

#### Regulatory

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.



- Medical device directive 93/42 EEC (M5 2007/47 EEC)
- DIN EN ISO 13485: 2003 AC:2007 certified: Quality management system
- EN ISO 13485: 2003 AC:2007 certified Quality management system
- EN ISO 13485: 2003 AC:2007 certified Quality management system (issued according to CMDCAS program requirements)
- 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 (insufflators, irrigation pump, insufflation tubing sets, irrigation tubing sets).

#### **Products certifications:**

Following products have the c CSA us mark:

- Camera SOPRO 167 (DV)
- Camera SOPRO 168
- Camera SOPRO 367
- Camera SOPRO 368 HD
- Camera SOPRO 162
- Camera SOPRO 184 (SDI)
- Insufflators range SOPRO 640 (201, 301 and 451)
- Irrigation pump SOPRO 670

<sup>\*</sup>the newest ones may be 510(k) pending.



#### **Research & Development**

Innovation being the key to improve health, Sopro-Comeg invests a significant part of its revenue in R&D and patents filing. Our key know-how is Medical imaging with a combination of young & experimented engineers focused on 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 Bean Computer 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 (see Urology catalog)
- Technical training

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#### Representative offices

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

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# SOPROCOMEG



## 2 • VIDEO CAMERAS

| SOPRO 397 - 3CCD Full HD                            |
|---|
| SOPRO 368 - 3CCD HDp13                              |
| SOPRO 367 - 3CCDp14                                 |
| SOPRO 169 - 1CCD Digilap Titanium and Multisp15     |
| SOPRO 169 - 1CCD Autoclavable sensor and Multis p16 |
| SOPRO 169 - 1CCD Sensor and Multis                  |
| SOPRO 184 - 1CCD Pendular                           |
| SOPRO 184 - 1CCDp19                                 |
| SOPRO 162 - 1CCDp20                                 |
| SOPRO 181 - 1CCD USB2 Ubicam                        |
| Sopro Imaging Medical softwarep22                   |
| Accessories for video cameras                       |



#### **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
- M type endoscope adapter
- Free scope rotation and locking system
- 3 Programmable buttons
- 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
- Desinfection by cold immersion in Steris/Sterrad plasma\*

#### Regulatory

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980

#### Environment

- $\bullet$  Operating Temperature range: +10°C / +40°C
- $\bullet$  Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- ullet Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous
- \* See user manual for more information

#### **SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)**

FULL HD

1080 p

- Digital zoom Up to 2.5x
- Freeze, Mirror and Gain functions
- Menu by Application
- Electronic anti-moire filter for flexible fiberscope
- 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 and manual adjustment of light intensity
- Automatic adjustment of sensitivity to low light (auto exposure)
- 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 RGB output: 3x0.7 V [P-P] & 0.3V [P-P] / 75 ohms
- 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

| Art.N°     | Description  |
|------------|--|
| S_397_9000 | Digital FULL HD 16/9 3CCD CCU, HDTV, PAL compatible  |
| S_397_9001 | Digital FULL HD 16/9 3CCD CCU, HDTV, NTSC compatible |
| S_397_8000 | Digital FULL HD 16/9 3CCD camera head, HDTV, C-mount |
| S_097_0001 | 24mm HD coupler, C-mount, scope holder               |
| S_097_0002 | 24mm HD coupler, with high torque                    |
| S_413024   | 16-34mm HD Zoom coupler                              |
| S_700206   | Medical keyboard, soakable, QWERTY, PS2              |



#### **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" (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
- M type endoscope adapter
- Free scope rotation and locking system
- Programmable buttons
- Signal / Noise ratio: 60 dB
- Programmable buttons
- Size of the sensor: L = 80mm;  $\emptyset = 32$  mm
- Weight of the sensor: 250 g
- Cable length: 3,60 meters
- Waterproof
- Desinfection by cold immersion in Steris/Sterrad plasma\*

#### **SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)**

- On screen displayed adjustments
- Adjustable shutter area
- Automatic mecanical shutter (1/50 to 1/100 000)
- Backlight function for arthroscopy
- Electronic anti-moire filter for flexible fiberscope
- 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)
- 2 peripheral triggerings
- 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 / 75 $\Omega$ )
- Power supply: (110-230 VAC ~ ; 50 60Hz)
- Power consumption: 45VA
- Two T 800 mA 250 V fuses (Only fuses marked UR)
- Continuous Service

#### Regulatory

- 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

- $\bullet$  Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- $\bullet$  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

| Art.N°      | Description  |
|-------------|--|
| \$_368_9000 | Digital HD 3CCD control unit, PAL, DVI output                    |
| S_368_9001  | Digital HD 3CCD control unit, NTSC, DVI output                   |
| S_367_8000  | Digital HD 3CCD camera head, C-mount, PAL                        |
| S_367_8001  | Digital HD 3CCD camera head, C-mount, NTSC                       |
| S_367_0002  | 18mm HD coupler, C-mount, scope holder                           |
| S_367_0003  | 18mm HD coupler with high torque focus ring                      |
| S_701004    | 18mm beamsplitter 90°, C-mount, rotatable head, without eyepiece |
| S_413024    | 16-34mm HD zoom adapter, C-mount, scope holder                   |
|             |  |



#### 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
- M type endoscope adapter
- Free scope rotation and locking system
- 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;  $\emptyset = 32$  mm
- Weight of the sensor: 250 g
- Cable length: 3,60 meters
- Waterproof
- Desinfection by cold immersion in Steris/Sterrad plasma\*

**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 fiberscope
- 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 peripheral triggerings
- 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  $(3x0,7Vcc/\&0,3Vcc/75\Omega)$
- 1 Y/C video outputs (1 Vcc & 0,3 Vcc  $/ 75\Omega$  Sync Negative)
- 1 composite video outputs (1 Vcc / 75 $\Omega$ )
- Power supply: (115-230 VAC ~ ; 50 60Hz)
- Power consumption: 45VA
- Two T 800 mÅ 250 V fuses (Only fuses marked UR)
- Continuous Service

| _   |     |     |   |     |
|-----|-----|-----|---|-----|
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- Electrical safety: Class 1, BF type
- $\bullet$  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

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

| Art.N°     | Description  |
|------------|--|
| S_367_9002 | Digital 3CCD control unit, PAL, DV output                        |
| S_367_9003 | Digital 3CCD control unit, NTSC, DV output                       |
| S_367_9000 | Digital 3CCD control unit, PAL,                                  |
| S_367_9001 | Digital 3CCD control unit, NTSC                                  |
| S_367_8000 | Digital HD 3CCD camera head, C-mount, PAL                        |
| S_367_8001 | Digital HD 3CCD camera head, C-mount, NTSC                       |
| S_367_0002 | 18 mm HD coupler, C-mount, scope holder                          |
| S_367_003  | 18 mm HD coupler with high torque                                |
| S_413024   | 16-34mm HD Zoom adapter, C-mount, scope holder                   |
| S_701004   | 18mm beamsplitter 90°, C-mount, rotatable head, without eyepiece |
|            |  |

See user manual for more information

**Fitanium** 



#### **SPECIFICATIONS OF DIGILAP TITANIUM**

Resolution: 752 x 582 PAL; 768 x 494 NTSC

• Definition: >500 lines • Sensitivity: 1.5 lux

• Signal / Noise ratio: 52 dB (Gain OdB)

• 2 programmable buttons • Sensor: 1 CCD 1/4"

• 30° system : 360° image rotation

Scanning (624 lines/50Hz)PAL, (525 lines/60Hz) NTSC

• Disconnectable light cable • Quick video cable exchange

• Size of the sensor: Useful length = 300mm Total length = 435mm

• Weight of the sensor = 390 g • Length of the cable: 3,20 meters

Autoclavable 134°

Waterproof

• Desinfection by cold immersion in Steris/Sterrad plasma\*

#### SPECIFICATIONS OF THE MULTI-SENSORS CONTROL UNIT

- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Electronic anti-moire filter for flexible fiberscope
- Automatic saving of the adjusted parameters
- Video enhancement
- Modification of the red and blue gain
- Reset to manufacturer settings
- Two peripheral triggerings
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Menu per application
- Color bar generator
- Automatic white balance
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 2500 g
- 2 Y/C video outputs (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)
- 2 composite video outputs (1 Vcc / 75 $\Omega$ )
- 2 SDI, 1 RGB & 1 DV IEEE1394 video outputs (in option)
- Power supply: (110-230 VAC ~ ; 50 60Hz)
- Power consumption: 25VA, with DV option: 35 VA
- 2 T 800 mA 250 V fuses (Use only fuses marked UL/CSA)
- Continuous Service

#### **Regulatory**

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC Class IIa
- $\bullet$  Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980

- Operating Temperature range: +10°C / +40°C
- Transport and storage Temperature range: -20°C / +40°C
- Relative Humidity range: 10 to 90 %
- Operating, Transport and Storage Atmospheric pressure range: 900hPa to 1060hPa
- Not protected against waterfalls (IPXO)
- Not adapted to use close to a mixture of inflammable anesthetic with air or oxygen or nitrous oxide
- \* See user manual for more information

| Art.N°     | Description   |
|------------|---|
| S_169_0104 | MULTIS CCU with DV & RGB outputs, PAL                                   |
| S_169_0108 | MULTIS CCU with DV & RGB outputs , NTSC                                 |
| S_169_0100 | MULTIS CCU with 2 SDI outputs, PAL                                      |
| S_169_0101 | MULTIS CCU with 2 SDI outputs, NTSC                                     |
| S_169_0102 | MULTIS CCU, PAL   |
| S_169_0103 | MULTIS CCU, NTSC  |
| S_169_6002 | DIGILAP TITANIUM 10mm 30° Autoclavable, PAL, with sterilisation basket  |
| S_169_6003 | DIGILAP TITANIUM 10mm 30° Autoclavable, NTSC, with sterilisation basket |
| S_169_6000 | DIGILAP TITANIUM 10mm 0° Autoclavable, PAL, with sterilisation basket   |
| S_169_6001 | DIGILAP TITANIUM 10mm 0° Autoclavable, NTSC, with sterilisation basket  |
|            |   |





#### SPECIFICATIONS OF THE AUTOCLAVABLE SENSOR

Resolution: 752 x 582 PAL; 768 x 494 NTSC

• Definition: >500 lines

Sensitivity: 1.5 lux
Signal / Noise ratio: 52 dB (Gain OdB)

• 2 programmable buttons Sensor: 1 CCD 1/3"

Scanning (624 lines/50Hz)PAL, (525 lines/60Hz) NTSC

C-Mount

Ergonomic focus ring

• M type endoscope adapter

• Free scope rotation and locking system

• 22.5mm integrated objective with antireflecting eyepiece

Magnetic focus ring

Quick video cable exchange

• Size of the sensor: L = 115mm;  $\emptyset = 32$  mm

• Weight of the sensor: 190 g

• Length of the cable: 3,60 meters

Autoclavable 134°

Waterproof

Desinfection by cold immersion in Steris/Sterrad plasma\*

#### SPECIFICATIONS OF THE MULTI-**SENSORS CONTROL UNIT**

On screen displayed adjustments

• Automatic electronic shutter: (1/50 to 1/100 000)

• Adjustable shutter area

Automatic saving of the adjusted parameters

• Electronic anti-moire filter for flexible fiberscope

Video enhancement

• Modification of the red and blue gain

Reset to manufacturer settings

• Two peripheral triggerings

Gamma adjustment

• 5 languages (English, French, German, Spanish, Italian)

Menu per application

Color bar generator

• Automatic white balance

• Size of the control unit: W: 300mm; D: 300mm; H: 66 mm

Weight of the control unit: 2500 g

2 Y/C video outputs (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)

• 2 composite video outputs (1  $Vcc / 75\Omega$ )

• 2 SDI, 1 RGB & 1 DV IEEE 1394 video outputs (in option)

Power supply: (110-230 VAC ~ ; 50 - 60Hz)

Power consumption: 25VA, with DV option: 35 VA

• 2 T 800 mA - 250 V fuses (Use only fuses marked UL/CSA)

Continuous Service

#### Regulatory

• 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

#### **Environment**

• Operating Temperature range: +10°C / +40°C

• Transport and storage Temperature range: -20°C / +40°C

• Relative Humidity range: 10 to 90 %

 Operating, Transport and Storage Atmospheric pressure range: 900hPa to 1060hPa

Not protected against waterfalls (IPXO)

 Not adapted to use close to a mixture of inflammable anesthetic with air or oxygen or nitrous oxide

| Art.N°     | Description  |
|------------|--|
| S_169_0104 | MULTIS CCU with DV & RGB outputs, PAL                                    |
| S_169_0108 | MULTIS CCU with DV & RGB outputs , NTSC                                  |
| S_169_0100 | MULTIS CCU with 2 SDI outputs, PAL                                       |
| S_169_0101 | MULTIS CCU with 2 SDI outputs, NTSC                                      |
| S_169_0102 | MULTIS CCU, PAL  |
| S_169_0103 | MULTIS CCU, NTSC   |
| S_169_4000 | Digital 1CCD Autoclavable camera head, PAL with integrated 22mm coupler  |
| S_169_4001 | Digital 1CCD Autoclavable camera head, NTSC with integrated 22mm coupler |

<sup>\*</sup> See user manual for more information



### **SPECIFICATIONS OF THE SENSOR**

Resolution: 752 x 582 PAL; 768 x 494 NTSC

• Definition: >500 lines • Sensitivity: 1.5 lux

• Signal / Noise ratio: 52 dB (Gain OdB)

• 2 programmable buttons • Sensor : 1 CCD 1/3"

Scanning (624 lines/50Hz)PAL, (525 lines/60Hz) NTSC

C Mount

Ergonomic focus ring

M type endoscope adapter

Free scope rotation and locking system

• Size of the sensor: L = 60 mm;  $\emptyset = 32 \text{ mm}$ 

• Weight of the sensor: 200g • Length of the cable: 3,60 meters

Waterproof

• Desinfection by cold immersion in Steris/Sterrad plasma\*

#### SPECIFICATIONS OF THE MULTI-SENSORS CONTROL UNIT

• On screen displayed adjustments

Automatic electronic shutter: (1/50 to 1/100 000)

• Adjustable shutter area

Automatic saving of the adjusted parameters

• Electronic anti-moire filter for flexible fiberscope

Video enhancement

Modification of the red and blue gain

• Reset to manufacturer settings

Two peripheral triggerings

Gamma adjustment

• 5 languages (English, French, German, Spanish, Italian)

Menu per application

Color bar generator

• Automatic white balance

• Size of the control unit: W: 300mm; D: 300mm; H: 66 mm

Weight of the control unit: 2500 g

2 Y/C video outputs (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)

• 2 composite video outputs (1 Vcc / 75 $\Omega$ )

• 2 SDI, 1 RGB & 1 DV IEEE 1394 video outputs (in option)

• Power supply: (110-230 VAC ~ ; 50 - 60Hz)

• Power consumption: 25VA, with DV option: 35 VA

• 2 T 800 mA - 250 V fuses (Use only fuses marked UL/CSA)

Continuous Service

#### Regulatory

• 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

#### Environment

• Operating Temperature range: +10°C / +40°C

• Transport and storage Temperature range: -20°C / +40°C

• Relative Humidity range: 10 to 90 %

• Operating, Transport and Storage Atmospheric pressure range: 900hPa to 1060hPa

Not protected against waterfalls (IPXO)

• Not adapted to use close to a mixture of inflammable an esthetic with air or oxygen or nitrous

| Art.N°     | Description  |
|------------|--|
| S_169_0104 | MULTIS CCU with DV & RGB outputs, PAL                            |
| S_169_0108 | MULTIS CCU with DV & RGB outputs , NTSC                          |
| S_169_0100 | MULTIS CCU with 2 SDI outputs, PAL                               |
| S_169_0101 | MULTIS CCU with 2 SDI outputs, NTSC                              |
| S_169_0102 | MULTIS CCU, PAL  |
| S_169_0103 | MULTIS CCU, NTSC   |
| S_169_2000 | Digital 1CCD camera head, C-mount, PAL                           |
| S_169_2001 | Digital 1CCD camera head, C-mount, NTSC                          |
| S-067_0004 | 22mm coupler   |
| S_067_0002 | 22mm coupler with high torque                                    |
| S_701004   | 18mm beamsplitter 90°, C-mount, rotatable head, without eyepiece |

<sup>\*</sup> See user manual for more information



• Sensor: 1 CCD 1/4"

• Resolution: 752x582 PAL; 768 x 494 NTSC

• 360° quick-lock system • Definition: >500 lines • Sensitivity: 1 lux

• Signal / Noise ratio : 52 dB (gain OdB)

Scanning (624 lines/50Hz)PAL, (525 lines/60Hz)NTSC

SPECIFICATIONS OF THE PENDULAR CAMERA HEAD

• Free scope rotation and locking system

• 2 programmable buttons

• Integrated objective: F12.3 and F17mm • Size of the sensor: L = 80 mm;  $\varnothing = 32 \text{ mm}$ 

 Weight of the sensor: 110 g • Cable length: 3 meters

Waterproof

• Desinfection by cold immersion in Steris/Sterrad plasma\*

• 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

#### **Environment**

- 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
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPXO)
- Not adapted to use close to a mixture of inflam- $\stackrel{\cdot}{\text{mable}}$  anaesthetic with air or oxygen or nitrous

**SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)** 

#### Automatic video settings detection

- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Video enhancement
- Electronic anti-moire filter for flexible fiberscope
- Modification of the red and the blue gain
- Intuitive menu with navigation knob
- OLED screen for exceptionnal contrast
- Menu by application and user's profiles
- Reset manufacturer settings
- Gamma adjustment
- 5 languages (French, Italian, Spanish, English, German)
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 1 peripheral triggering: delivered with SIM for the USB2
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 1500 g • 1 RGBS video output (3x0,7Vcc/& 0,3Vcc/75 $\Omega$  Sync Negative)
- 1 Y/C video output (1 Vcc & 0,3 Vcc / 75  $\Omega$  Sync Negative)
- 1 composite video output (1 Vcc / 75  $\Omega$ )
- Two digital SDI outputs (option)
- 1 USB2 output
- Power supply: (100-230 VAC ~ ; 50 60Hz)
- Power consumption: 25VA
- Two T 800 mA 250 V fuses (Only fuses marked UL)
- Continuous Service

| Art.N°     | Description  |
|------------|--|
| S_184_8000 | Digital 1CCD Pendular camera head, PAL, integrated 12,3mm objective  |
| S_184_8001 | Digital 1CCD Pendular camera head, NTSC, integrated 12,3mm objective |
| S_184_9000 | Digital 1 CCD CCU, PAL, 2 SDI outputs                                |
| S_184_9001 | Digital 1 CCD CCU, NTSC, 2 SDI outputs                               |
| S_184_9002 | Digital 1 CCD CCU, PAL   |
| S_184_9003 | Digital 1 CCD CCU, NTSC  |
| S_081_0010 | USB Dongle to activate SIM with unlimited patients management        |

See user manual for more information



#### **SPECIFICATIONS OF THE SENSOR**

• Sensor: CCD 1/4" high sensitivity

• Radel camera head

Resolution: (752 x 582) PAL; (768 x 494) NTSC

• Definition: 500 lines Sensitivity: 2 lux

• Signal/Noise Ratio: 52 dB

Scanning (624 lines/50Hz)PAL, (525 lines/60Hz) NTSC

Ergonomic focus ring

• M type endoscope adapter

• Free scope rotation and locking system

C-Mount

• 2 programmable buttons

• Size of the sensor: L = 87mm;  $\emptyset = 30$  mm

• Weight of the sensor: 210 g

• Cable length: 3 meters

Waterproof

Desinfection by cold immersion in Steris/Sterrad plasma\*

- 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

#### **Environment**

- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -20°C / +40°C
- $\bullet$  Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPXO)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide
- \* See user manual for more information

#### SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Automatic video settings detection
- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Video enhancement
- Electronic anti-moire filter for flexible fiberscope
- Modification of the red and the blue gain
- Intuitive menu with navigation knob
- OLED screen for exceptionnal contrast
- Menu by application and user's profiles
- Reset manufacturer settings
- Gamma adjustment
- 5 languages (French, Italian, Spanish, English, German)
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 1 peripheral triggering: delivered with SIM for the USB2
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 1500 g
- 1 RGBS video output  $(3x0,7Vcc/\&0,3Vcc/75\Omega$  Sync Negative)
- 1 Y/C video output (1 Vcc & 0,3 Vcc / 75 Ω Sync Negative)
- 1 composite video output (1 Vcc / 75  $\Omega$ )
- Two digital SDI outputs (option)
- 1 USB2 output
- Power supply: (100-230 VAC ~ ; 50 60Hz)
- Power consumption: 25VA
- Two T 800 mA 250 V fuses (Only fuses marked UL)
- Continuous Service

| Art.N°     | Description   |
|------------|---|
| S_184_9000 | Digital 1CCD CCU, PAL, 2 SDI outputs                          |
| S_184_9001 | Digital 1CCD CCU, NTSC, 2 SDI outputs                         |
| S_184_9002 | Digital 1CCD CCU, PAL   |
| S_184_9003 | Digital 1CCD CCU, NTSC  |
| S_184_8100 | Digital 1CCD camera head, 1/4"CCD, PAL, C-mount               |
| S_184_8101 | Digital 1CCD camera head, 1/4"CCD, NTSC, C-mount              |
| S_081_0001 | 17mm coupler for 1ccd, C-mount, scope holder                  |
| S_081_0002 | 12mm coupler for 1ccd, C-mount, scope holder                  |
| S_081_0010 | USB Dongle to activate SIM with unlimited patients management |



#### SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Automatic white balance
- Video enhancement
- Electronic anti-moire filter for flexible fibrescope
- Modification of the red and blue gain
- 5 languages (French, Italian, Spanish, English, German)
- Automatic detection of the color temperature according to the used light source
- Bright and blue LCD display
- Automatic saving of the adjusted parameters
- Foot pedal in option for picture freezing on USB2
- Size of the control unit: W: 205mm; D: 210mm; H: 55 mm
- Weight of the control unit: 900 g • 1 Y/C video output (1 Vcc & 0, 3 Vcc / 75  $\Omega$  Sync Negative)
- 1 composite video output (1 Vcc / 75  $\Omega$ )
- 1 USB2 output (option)
- Delivered with SOPRO IMAGING MEDICAL Software
- Power supply: (100-230 VAC ~ ; 50 60Hz)
- Power consumption: 25VA
- Two T 800 mÅ 250 V fuses (Only fuses marked UL)
- Continuous Service

#### SPECIFICATIONS OF THE SENSOR

Sensor: CCD 1/3" high sensitivity

Resolution: (752 x 582) PAL; (768 x 494) NTSC

• Definition: 470 lines • Sensitivity: 2 lux

Signal/Noise Ratio: 52 dB

- Scanning (624 lines/50Hz)PAL, (525 lines/60Hz) NTSC
- Ergonomic focus ring
- M type endoscope adapter
- Free scope rotation and locking system
- C-Mount
- Size of the sensor: L = 42mm;  $\emptyset = 28$  mm
- Weight of the sensor: 37 g
- Cable length: 3, 25 meters
- Waterproof
- Desinfection by cold immersion in Steris/Sterrad plasma\*

#### Regulatory

- Electrical safety: Class 1, BF type
- Comply with the European 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980

- $\bullet$  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
- Continuous Service
- Not protected against waterfalls (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.
- \* See user manual for more information
- \*\* Sopro Imaging Medical

| Art.N°     | Description   |
|------------|---|
| S_162_8000 | 1CCD digital camera head, PAL, C-mount                              |
| S_162_8001 | 1CCD digital camera head, NTSC, C-mount                             |
| S_162_9000 | 1CCD digital camera, PAL, USB2 output, CD-ROM with limited SIM** $$ |
| S_162_9002 | 1CCD digital camera, NTSC, USB2 output, CD-ROM with limited SIM $$  |
| S_162_9001 | 1CCD digital camera, PAL  |
| S_162_9003 | 1CCD digital camera, NTSC   |
| S_067_0002 | 22mm coupler with high torquer                                      |
| S_067_0004 | 22mm coupler, C-mount, scope holder                                 |
| S_009002   | Foot remote control only for USB2 output                            |
| S_081_0010 | USB dongle to activate SIM with unlimited patients management       |

JBICAM



#### **RECOMMENDED COMPUTER CONFIGURATION**

 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

- Electrical safety: Class 1, BF type · Comply with the European stan-
- dard 93/42/EEC Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18; IEC 60417 and EN 980

#### **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
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

#### SPECIFICATIONS OF THE USB CAMERA HEAD

- Sensor: CCD 1/4" high sensitivity Automatic video setting detection
- Radel camera head
- 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 fiberscope
- 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,  $\emptyset = 30 \text{ mm}$
- 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
- Cold desinfection
- Continuous Service

| Art.N°     | Description   |
|------------|---|
| S_181_0001 | UBICAM, USB2 stand alone solution, PAL, C-mount, CD with SIM limited to 2 patients  |
| S_181_0004 | UBICAM, USB2 stand alone solution, NTSC, C-mount, CD with SIM limited to 2 patients |
| S_081_0001 | 17mm coupler, C-mount, scope holder   |
| S_081_0002 | 12mm coupler, C-mount, scope holder   |
| S_081_0010 | USB Dongle to activate SIM with unlimited patients management                       |

#### **Sopro Imaging software**





#### **SOPRO IMAGING MEDICAL SOFTWARE**

- Patient management
- Image and video captures
- Image annotation and drawings
- Zoom
- Medical reports
- Export your images and videos to DVD, USB, mail, ...

#### RECOMMENDED COMPUTER CONFIGURATION

- Operating system: Windows 7
- Processor: Intel Core2
- RAM: 2 GbHard 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

#### Accessories for video cameras

#### Art.-No.

S\_097\_0001

#### 24mm HD coupler

C-mount, M type scope holder with locking capacity, for with  $S_397$  camera head weight : 60g

waterproof

#### Art.-No.

S\_097\_0002

#### 24mm HD coupler

C-mount, M type scope holder with locking capacity, for with  $S_397$  camera head with High torque focus ring for Arthroscopy

weight: 60g waterproof



#### Art.-No.

S\_067\_0004

#### 22mm coupler for 1CCD

C-mount, M type scope holder with locking capacity, for S\_169 & S\_162 cameras heads

weight: 44g waterproof



S\_067\_0002

#### 22mm coupler for 1CCD

C-mount, M type scope holder with locking capacity, for S\_169 & S\_162 cameras heads

with High torque focus ring for Arthroscopy

weight : 44g waterproof



#### Art.-No.

S\_367\_0002

#### 18mm HD coupler

C-mount, M type scope holder with locking capacity, for S\_367 & S\_368 camera heads

weight: 54g waterproof

#### Art.-No.

S\_367\_0003

#### 18mm HD coupler

C-mount, M type scope holder with locking capacity, for 367 & S\_368 camera heads

with High torque focus ring for Arthroscopy

weight: 54g waterproof



S 081 0001

waterproof

#### 17mm coupler for 1CCD

C-mount, M type scope holder with locking capacity, for S\_181 & S\_184 camera heads weight: 20g



#### Accessories for video cameras

Art.-No. S\_081\_0002

#### 12mm coupler for 1CCD

C-mount, M type scope holder with locking capacity, for S\_181 camera head

weight: 20g waterproof



Art.-No. S\_701004

#### 18mm Beamsplitter 90°

C-mount, 360° rotatable head with locking capacity, without eyepiece, for S\_397, S\_169 & S\_162 waterproof



Art.-No.

S\_413024

#### 16-34mm HD Zoom adapter

C-mount, scope holder for all camera heads waterproof



Art.-No.

S\_700159

Sterilisation basket for Digilap Titanium

Art.-No. S 700160

Spares Silicones X 2 For 700159



Art.-No. S\_700106

Sterilisation basket for 1CCD autoclavable camera head

Art.-No. S\_700107

Spares Silicones X 3 For 700106



Art.-No. S\_700145

USB2 Amplifier 5 meters long for S\_181



## Medical carts

#### Accessories for video cameras

Art.-No.

S\_700206

#### **Medical Keyboard**

soakable, QWERTY, PS2, for S\_397 video camera & USB300/200



Art.-No.

S\_302027

#### **Storz/Olympus Adapter**

for Flexible Scopes



Art.-No.

S\_302032

#### **Pentax Adapter**

for Flexible Scopes



Art.-No. S\_302030

#### Fujinon Adapter

for Flexible Scopes



Art.-No.

S\_009002

Footswitch for S\_162 with USB2 output (jack connector)



# SOPROCOMEG



## 3 • LIGHT SOURCES

| SOPRO 230 xenon light source           |
|--|
| SOPRO 218 xenon light source           |
| SOPRO 210 xenon light source           |
| SOPRO 281 LED light sourcep31          |
| SOPRO 225 twin halogen light sourcep32 |
| Light cablesp33                        |
| Light sources accessories              |
| Light cable accessories                |



### Regulatory

- 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

#### Environment

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

#### **SPECIFICATIONS**

- Nominal operating power: 300 Watts
- Colour temperature: 6200°K
- Antiblooming system with light cable detection
- Light intensity adjustment with touch buttons
- Light intensity and lamp 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
- Lamp lifetime: 500 hours
- Dimensions: D: 300mm; W: 311mm; H: 125 mm
- Weight: 5 kg
- Power supply: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 485VA
- 2 Fuses T 4A. (UL/CSA only)
- Continuous service

| Art.N°     | Description                                |  |
|------------|--|--|
| S_230_0002 | 300 Watts, EU Power Cord - Storz adapter   |  |
| S_230_0007 | 300 Watts, EU Power Cord - Olympus adapter |  |
| S_230_0005 | 300 Watts, US Power Cord - Storz adapter   |  |
| S_230_0009 | 300 Watts, US Power Cord - Olympus adapter |  |



- Nominal operating power: 180 Watts
- Colour temperature: 5800°K
- Antiblooming system with light cable detection
- Light intensity adjustment with touch buttons
- Light intensity and lamp 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
- Lamp lifetime: 500 hours
- Dimensions: D: 300mm; W: 311mm; H: 125 mm
- Weight: 5 kg
- Power supply: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 450VA
- 2 Fuses T 4A. (UL/CSA only)
- Continuous service

#### Regulatory

- 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
- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

| Art.N°     | Description                                |  |
|------------|--|--|
| S_218_0007 | 180 Watts, EU Power Cord - Storz adapter   |  |
| S_218_0010 | 180 Watts, EU Power Cord - Olympus adapter |  |
| S_218_0006 | 180 Watts, US Power Cord - Storz adapter   |  |
| S_218_0011 | 180 Watts, US Power Cord - Olympus adapter |  |
|            |  |  |



#### **SPECIFICATIONS**

- Nominal operating power: 100 Watts
- Colour temperature: 5800°K
- Antiblooming system with light cable detection
- Light intensity adjustment with touch buttons
- Light intensity and lamp 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
- Lamp lifetime: 500 hours
- Dimensions: D: 300mm; W: 311mm; H: 125 mm
- Weight: 5 kg
- Power supply: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 240VA
- 2 Fuses T 4A. (UL/CSA only)
- Continuous service

#### Regulatory

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

| Art.N°     | Description                                |  |
|------------|--|--|
| S_210_0003 | 100 Watts, EU Power Cord - Storz adapter   |  |
| S_210_0004 | 100 Watts, EU Power Cord - Olympus adapter |  |
| S_210_0002 | 100 Watts, US Power Cord - Storz adapter   |  |
| S_210_0006 | 100 Watts, US Power Cord - Olympus adapter |  |



#### **SPECIFICATIONS**

- LED technology with 100 lumens/watt performances
- Nominal power: 30 W (light intensity of a 100W xenon light source)
- LED lifetime: 50.000 hours (in advised conditions of use)
- Color temperature: > to 4500°K
- Light intensity up to 120 000 lux (output of a 2.5m cable)
- Light cable input: Storz only
- Stand-by mode with light intensity memory
- Electronical iris
- 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

- Regulatory
- 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

- $\bullet$  Operating Temperature range: +10°C / +40°C
- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

| Art.N°     | Description                                       |  |
|------------|---|--|
| S_281_0001 | LED light source with external transformer        |  |
| S_700267   | Black light cable L:2.5m ; Ø: 4.8mm, autoclavable |  |



#### Regulatory

- 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

#### **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 pressurerange: 700hPa to 1060hPa
- Not protected against waterfalls (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

#### **SPECIFICATIONS**

- Double halogen lamps: 250 W x 2
- Colour temperature: 3200°K
- Mechanical iris
- Manual light intensity adjustment
- Lamp lifetime: 50 hours
- Easy access to the bulb
- Easy selection of the lamp by pressing the central button
- Dimensions: D: 300mm; W: 311mm; H: 90mm
- Weight: 3,9kg
- Power Consumption: maximum 270 VA
- Power supply: (115 230 VAC ~ / 50 60 Hz) (manual switch on the rear panel)
- 2 Fuses T 4A. (Marked UR only)
- Continuous service

| Art.N°     | Description                   |  |  |
|------------|-------------------------------|--|--|
| S_225_0002 | EU Power Cord - Storz adapter |  |  |
| S_225_0003 | US Power Cord - Storz adapter |  |  |

#### **Light cables**

| Ø     | L.  | ArtNo.   |
|-------|-----|----------|
| 4.8mm | 3   | S_700067 |
|       | 2.5 | S_700205 |
|       | 2.3 | S_700060 |
|       | 1.8 | S_700218 |
| 3.5*  | 3   | S_700216 |
|       | 2.3 | S_700215 |
|       | 1.8 | S_700068 |
| 2.5*  | 3   | S_700214 |
|       | 2.3 | S_700213 |
|       | 1.8 | S_700212 |



- Xenon light source compatible and autoclavable at 134°
- Reinforced sheath
- Universal model delivered without connector

\*For scope diameter  $<4\,\mathrm{mm}$ 

Art.-No.

S\_700267

#### Black LED light cable

Storz/Storz connectors included 1:2.5m;  $\varnothing$  4.8mm



#### Light source accessories

#### **Replacement Bulbs**

Art.-No.

S\_006003

300W Xenon bulb

Art.-No.

S\_006005

180W Xenon bulb



Art.-No. S\_006004

100W Xenon bulb



Art.-No. S\_006009

225W Halogen bulb



3

Art.-No. S\_700046 **Wolf/S&N** 

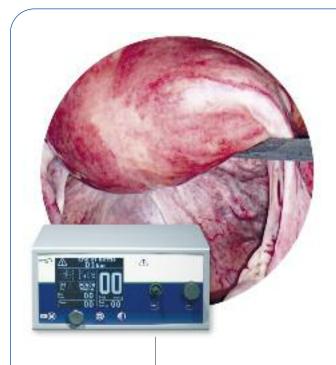
Art.-No. S\_700047

Acmi/Stryker

### Light cable accessories **Endoscope side connectors** Art.-No. S\_700051 Storz/Olympus Art.-No. S\_700043 Wolf/S&N Art.-No. S\_700048 Acmi/Stryker Light source side connectors Art.-No. S\_700044 Storz Art.-No. S\_700045 **Olympus**

# SOPROCOMEG

# SOPROCOMEG



### 4 • INSUFFLATORS

| SOPRO 640 - 45 L Insufflator | <br>р38 |
|------------------------------|---------|
| SOPRO 640 - 30 L Insufflator | <br>р39 |
| SOPRO 640 - 20 L Insufflator | <br>p40 |
| Accessories                  | <br>p41 |





- Maximum flow: 45 1/min in high flow mode 2 1/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy function : display in real time the remaining time of the CO2 bottle
- 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 conta-
- 5 languages (French, Italian, Spanish, English, German)
- 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: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 40VA
- 2 x 2.5 AT 250V time-lag fuses UR
- Continuous Service

| Art.N°     | Description                                   |
|------------|---|
| S_640_4002 | 45 L - EU Power Cord - with autonomy features |
| S_640_4004 | 45 L - US Power Cord - with autonomy features |

### Regulatory

- 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

### **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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.



### **SPECIFICATIONS**

- Maximum flow: 30 I/min in high flow mode 2 I/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy function : display in real time the remaining time of the CO2 bottle
- Blow-off pressure: 0 to 24 mmHg (accuracy of 1mmHg)
- Clear messages displayed with sound alarms
- External desufflation valve for over pressure to avoid cross conta-
- 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: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 40VA
- $2 \times 2.5$  AT 250V time-lag fuses UR
- Continuous Service

| Art.N°     | Description                                   |
|------------|---|
| S_640_3005 | 30 L - EU Power Cord - with autonomy features |
| S_640_3008 | 30 L - US Power Cord - with autonomy features |
| S_640_3009 | 30 L - EU Power Cord                          |
| S_640_3010 | 30 L - US Power Cord                          |

### Regulatory

- 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

### **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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.



### **SPECIFICATIONS**

- Maximum flow: 20 I/min in high flow mode 2 I/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy function: display in real time the remaining time of the CO2 bottle
- 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: (100 230 VAC ~ / 50 60 Hz)
- Power consumption: 40VA
- 2 x 2.5 AT 250V time-lag fuses UR
- Continuous Service

| Art.N°     | Description          |  |  |
|------------|----------------------|--|--|
| S_640_2002 | 20 L - EU Power Cord |  |  |
| S_640_2004 | 20 L - US Power Cord |  |  |

### Regulatory

- Electrical safety : Class 1
- 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

### Environment

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

### Accessories

Art.-No.

S\_607103L

### Sterile single use insufflation tubing

made of PVC including sterile viral CO2 filter 0,027ld delivered by pack of 20 pieces



Art.-No.

S\_607043L

### **Reusable tubing**

autoclavable



Art.-No.

S\_016006L

### Sterile viral CO2 filter

single use, 0,027ì delivered by pack of 50 pieces



### **CO2** connection

Art.-No.

S\_017036L

### Flexible hose for high pressure bottle (60bars)

US-DIN 477-1, n°6, 1 meter FOR EUROPE

Art.-No.

S\_017037L

### Flexible hose for high pressure bottle (60bars)

US- UNF 7/16" US, 1 meter FOR USA

Art.-No.

S 391 000 023

### Flexible hose for high pressure bottle (60bars)

US-IT (ISO5145), 1 meter FOR ITALY



### Central gas supply hoses (Max 7 bars)

Contact us for more details

### **CO2** bottle connections

Art.-No.

S\_017023

### Pin Index connection

for DIN 477-1 n°6

Art.-No.

S\_017034

### **Pin Index connection**

for UNF 7/16" US



# SOPROCOMEG



### 5 • FLUID MANAGEMENT

| SOPRO 670 - Irrigation and suction pump for Arthroscopyp44 |
|--|
| Accessories  |
| Irrigation pump for Gynecology and Laparoscopyp46          |
| Accessories  |
| Irrigation and suction pump for Urology and Laparoscopyp48 |
| Accessories  |
| SOPRO 671 - Irrigation and suction pump for Laparoscopyp50 |
| Accessories  |



- Regulatory
   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

### **Environment**

- $\bullet$  Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 7.5%
- $\bullet$  Transport and storage Temperature range: -40° C / +70° C
- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

### **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

| Art.N°     | Description   |
|------------|---------------|
| S_670_0001 | EU Power Cord |
| S_670_0002 | US Power Cord |

Insufflators

### Accessories for the SOPRO 670

### Art.-No.

S\_009007

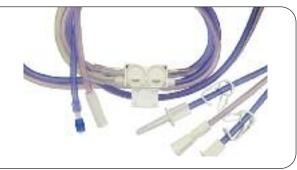
Pneumatic remote control IP32



### Art.-No.

S\_670\_003

1 sterile single use irrigation / suction tubing set (pack of 15 pieces)



### Art.-No.

S\_700268

### Lagoon 250, suction regulator

0 to -200mbar (0 to -150mmHg), maximum flow 201/min NF input connector, autoclavable 134°C to be used on the suction line when hospital vaccum center is too strong

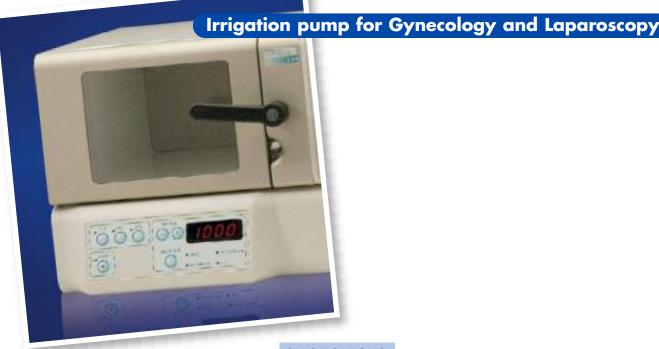
Art.-No. S\_700269

### **Bacteria filters**

(pack of 100 pieces)



Medical carts



### Regulatory

- Electrical safety: Class 1, BF type without direct contact with the patient
- Comply with the European standard 93/42/EEC - Class Ila
- Comply with the international standards IEC 60601-1;EN 60601-1-2 / group 1 / class B (medical); IEC 60601-2-18; IEC 60417 and EN 980
- EMC: EN 6100-3-2/3 (harmonic and flickers)
- International protection: Class IP21 for ENDO-FLOW / Class IP67 for the pedal

### **Environment**

- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 7.5%
- $\bullet$  Transport and storage Temperature range: -40° C / +70° C
- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

### **SPECIFICATIONS**

- An innovative solution for continuous and none pulsating liquid flow to clean the surgical field
- Automatic over pressure management
- Pressure chamber capacities: Standard NaCl sacs up to 3 liters
- Pneumatic equipment
- The selected pressure is displayed on the front panel and is manually regulated during utilization.
- Built-in heating system to keep the chamber at 38°C (+/-2°C)
- Irrigation pressure:
  - Gynecology (LOW PRESSURE MODE): 0 to 230 mbar (10 mbars steps) or 0 -173mmHg  $\,$
  - Laparoscopy (HIGH PRESSURE MODE): 0 to 1500 mbar (100 mbars steps) or 0 1125mmHg
- Energy source: compressed air from operating room 3.5 to 10 bars
- Lighting on the pressure chamber
- Aspiration by connection to the hospital vacuum system, controlled by a hand piece connected to the tubing set, or controlled by footswitch via the red electro-clamp placed on the front of the machine.
- Dimensions: L. 375mm; D. 350mm; H. 240mm
- Weight: 18 kg
- Power: 780 Watts
- Power supply: (220 240 VAC ~ / 50 60 Hz)
- Continuous service

| Art.N°   | Description   |
|----------|---|
| S_700225 | Irrigation pump for laparoscopy and Gynecology - Endoflow 230 |
| S_700224 | Air/ machine cable connection, L:5m ; 3.5 bars France         |
| S_700226 | Power cable 5m - EU   |

Shaver

### Fluid management

### Accessories

### Art.-No.

S\_700221L

### Disposable set for hysteroscopy

double percutor irrigation and suction tubings (set of 20)



### Art.-No.

S\_700223L

### Disposable set for irrigation and suction

single percutor 5mm cannula (set of 8)



Medical carts



### Regulatory

- Electrical safety: Class 1, BF type without direct contact with the patient
- Comply with the European standard 93/42/EEC Class IIa
- Comply with the international standards IEC 60601-1;EN 60601-1-2 / group 1 / class B (medical); IEC 60601-2-18; IEC 60417 and EN 980
- EMC: EN 6100-3-2/3 (harmonic and flickers)
- International protection: Class IP21 for ENDO-FLOW / Class IP67 for the pedal

### Environment

- $\bullet$  Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

### **SPECIFICATIONS**

- An innovative solution for continuous and none pulsating liquid flow to clean the surgical field
- Automatic over pressure management
- Pressure chamber capacities: Standard NaCl sacs up to 3 liters
- Pneumatic equipment
- The selected pressure is displayed on the front panel and is manually regulated during utilization.
- Built-in heating system to keep the chamber at 38°C (+/-2°C)
- Irrigation pressure:
  - Urology (LOW PRESSURE MODE): 0 to 190 mbars (10 mbars steps) or 0 -143mmHg
  - Laparoscopy (HIGH PRESSURE MODE): 0 to 1500 mbars (100 mbars steps) or 0 -1125mmHg
- Energy source: compressed air from operating room 3.5 to 10 bars
- Lighting on the pressure chamber
- Aspiration by connection to the hospital vacuum system, controlled by a hand piece connected to the tubing set, or controlled by footswitch via the red electro-clamp placed on the front of the machine.
- Dimensions : L. 520mm; D. 350mm; H. 240mm
- Weight: 27 kg
- Power: 780 Watts
- Power supply: (220 240 VAC ~ / 50 60 Hz)
- Continuous service

| Art.N°   | Description   |      |
|----------|---|------|
| S 700237 | Double pump "cuve" for Laparoscopy and Urology with suction pump - Endoflow | 2190 |

### Accessories

### Art.-No.

### Disposable urology laser irrigation tubing

one spike with "flush" chamber sterile 10/box

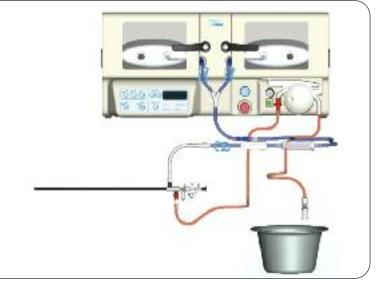


### Art.-No.

S\_700238L

### Disposable urology set for resection

double-percutor with "Post-Op" irrigation set 15/box

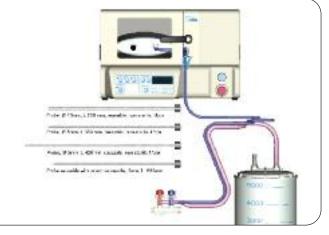


### Art.-No.

S\_700223L

### Disposable set for irrigation and suction

single percutor 5mm cannula (set of 8)



### SOPRO 671 - Irrigation and suction pump for Laparoscopy



### Regulatory

- 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

### **Environment**

- 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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

### **SPECIFICATIONS**

- For the surgical-therapeutic pelviscopy/laparoscopy for rinsing of the abdominal cavity with physiological NaCl-solution
- Instillation quantity: 1,5 l/min +/- 10% (limited to 250ml/10 seconds)
- Instillation pressure: 200 mmHg
- Suction capacity is 2 1/min
- Large-volume 1, 25 liter secretion trap with graduation.
- Monofil-bivalent rinsing tubes allowing alternatively to instill NaClsolution or to absorb blood and tissue particles
- Vacuum: up to 0.4bar
- Dimensions: L:550 x H:110 x D:230 mm (with accessories H = 400 mm)
- Delivered with: 1 secretion trap 1250ml, 1 lid for secretion trap, 1 filter, 1 puncture tube 240mm, 1 pressure tube set and a 2.5m long power cable.
- Weight: with accessories approx. 6 kg
- Power supply: (220 240 VAC ~ / 50 60 Hz)
- Power consumption: 165 VA
- Continuous service

| Art.N°     | Description                                 |
|------------|---|
| S_671_0001 | Irrigation and suction pump for Laparoscopy |

330mm

5mm

### **Suction-irrigation units accessories**

### Suction and irrigation tube 5 mm with pistol handle monofil-bivalent rinsing tube

bifilar system

allow controlling instillation quantity of saline solution preheated to body

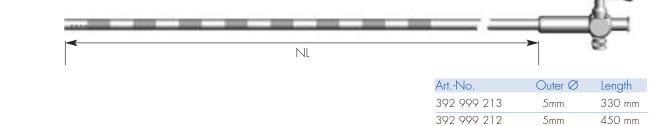
temperature or aspiration of saline solution and secretion through an aspiration system



S\_700284L



with Luer-Lock connection and stopcock



### Suction and irrigation tube

with Luer-Lock connection



| ArtNo.      | Outer Ø | Length |
|-------------|---------|--------|
| 392 999 201 | 5mm     | 330 mm |

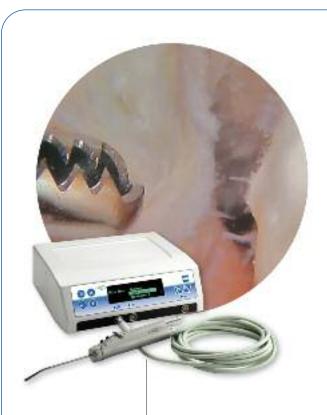
### Set of suction and irrigation tubes

with interchangeable tubes  $\varnothing$  5mm and 10mm with Luer-Lock connection



| ArtNo.      | Length |
|-------------|--------|
| 392 999 202 | 330 mm |

# SOPROCOMEG



### 6 • SHAVER

| SOPRO 684 - Shaver handpieces               |
|---|
| SOPRO 684 - Multi purpose handpiecep54      |
| SOPRO 684 - Control unit and foot switchp55 |
| Shaver blades and bursp56                   |
| Multi purpose handpiece accessoriesp57      |

Insufflators



### **SOPRO 684 Shaver handpieces**

### **SPECIFICATIONS**

- High torque motor
- Superior cutting performances with hardened shave blade tips
- Suitable for small and large joint arthroscopy
- Precise speed control via handpiece buttons or foot switch
- Ergonomic and light weight handpiece
- Smooth and variable suction compatible with all irrigation systems
- One handed, bi-directional shaver cutter loading
- Machine washable
- Automatic blade and bur recognition defaults to optimum speed setting
- Speed range

Burs: 500 - 8000 rpm

Straight shaver cutter: 300 - 3000 rpm

Oscillating straight shaver cutter: 500 - 1500 rpm

Curved shaver cutter: 300 - 1000 rpm

Oscillating curved shaver cutter: 500 - 1000 rpm

- 2 controls (in option)
- Material: Anodised aluminium and stainless steel
- Vacuum steam autoclave, wrapped or unwrapped, minimum 3 minutes @ 134°C, 8 minute minimum drying time
- Weight: 284g (Ex cable)
- Length: 152mm
- Diameter: 35mm
- Voltage: 24V Continuous service

### Regulatory\*

- Electrical safety: Class 1, B 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

### Environment\*

- $\bullet$  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 (IPXO)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

| Art.N°     | Description  |
|------------|--|
| S_684_8000 | Sopro 684 shaver handpiece with button control     |
| S_684_8001 | Sopro 684 shaver handpiece with foot pedal control |

# **SOPRO 684 Multi purpose handpiece**

### **SPECIFICATIONS**

- Speed: 0 1100 rpm
- Cannulation: 4.1 mm
- Connects to the Power console power supply via 4 metre cable
- Forward, reverse or oscillating modes are available from handpiece trigger or from the power supply settings.
- Vacuum steam autoclave, wrapped or unwrapped, minimum 3 minutes @ 134°C, 8 minute minimum drying time
- Continuous service

| Art.N° Description |                                     |  |  |  |  |
|--------------------|-------------------------------------|--|--|--|--|
| S_684_8002         | Sopro 684 Multi purpose handpiece   |  |  |  |  |
| S_700274           | Multi purpose handpiece power cable |  |  |  |  |



### **SOPRO 684 Control unit**

### **SPECIFICATIONS**

- Foot switch with variable speed selection
- Direction: Selection for Forward/Reverse/Oscillate and
- Tool Select: Selects power output socket on the control unit
- Speed Control: Variable speed control of selected Instrument
- Foot Guard: Protects against accidental actuation of the foot control. The foot guard can also be used to move the Foot Switch and folds flat when not required.
- Mains input: 230 Vac, 120Vac, 100Vac
- Mains power cord: 3 m
- Continuous service

| Art.N°     | Description                         |
|------------|-------------------------------------|
| S_684_9000 | Sopro 684 control unit - EU plug    |
| S_684_9001 | Sopro 684 control unit - UK plug    |
| S_684_9002 | Sopro 684 control unit - US plug    |
| S_684_9003 | Sopro 684 control unit - AUS plug   |
| S_684_9004 | Sopro 684 control unit - SWISS plug |



### **SPECIFICATIONS**

- Features forward, reverse, oscillating and safe mode
- A or B power output selection
- Variable speed selection
- Continuous service

| Art.N°     | Description |  |
|------------|-------------|--|
| S_684_0010 | Foot switch |  |

### Shaver blades and burs



| Straight blo | ades                      |             | Size / Art. n°                 |                              |                              |                              |
|--------------|---------------------------|-------------|--------------------------------|------------------------------|------------------------------|------------------------------|
|              | Function                  | Ø2.5 mm     | Ø3.5 mm                        | Ø4.2 mm                      | Ø5.5 mm                      | Ø6.5 mm                      |
|              | Resector                  | S_725 000 L | S_735 000 L                    | S_742 000 L                  | S_755 000 L                  | S_765 000 L                  |
| -            | Agressive resector        | S_725 001 L | S_735 001 L                    | S_742 001 L                  | S_755 001 L                  | S_765 001 L                  |
|              | Rapid resector            | -           | -                              | S_742 002 L                  | S_755 002 L                  | -                            |
|              | Rapid agressive resector  | -           | -                              | S_742 003 L                  | S_755 003 L                  | -                            |
|              | Meniscus cutter           | -           | S_735 002 L                    | S_742 004 L                  | S_755 004 L                  | -                            |
| W-3)         | Agressive meniscus cutter | -           | S_735 003 L                    | S_742 005 L                  | S_755 005 L                  | -                            |
| -            | Rapid meniscus cutter     | -           | -                              | S_742 006 L                  | S_755 006 L                  | -                            |
|              | Side cutter               | -           | S_735 004 L                    | S_742 007 L                  | S_755 007 L                  | -                            |
| Straight bu  | rs                        |             | Size / Art. n°                 |                              |                              |                              |
|              | Function                  | Ø2.5 mm     | Ø3.5 mm                        | Ø4.2 mm                      | Ø5.5 mm                      | Ø6.5 mm                      |
|              | Round bur                 | -           | S_735 005 L<br>Ø 2.5 mm cutter | S_742 008 L<br>Ø 3 mm cutter | S_755 008 L<br>Ø 4 mm cutter | S_765 002 L<br>Ø 5 mm cutter |
|              | Oval bur                  | -           | -                              | -                            | S_755 008 L<br>Ø 4 mm cutter | S_765 003 L<br>Ø 5 mm cutter |
|              | Tapered bur               | -           | -                              | -                            | S_755 010 L<br>Ø 4 mm cutter | S_765 004 L<br>Ø 5 mm cutter |

### Disposable curved blades



- Shaver blades and burs are individually sealed in sterile blister packs and supplied in a box of 5.
  High quality, extra sharp, hardened shaver blade tips deliver superior quality performance
- Reusable shaver blades and burs are available on request.
- Names and references are subject to change without prior notice

### Multi purpose handpiece accessories

### Art.-No.

S\_700247

### Jacobs chuck 0 - 4 mm (5/32")

Speed: 0 - 1100 rpm Cannulation: 3.1 mm



### Art.-No.

S\_700248

### Quick release chuck A.O.Synthes/ASIFTM

Speed: 0 - 1100 rpm Cannulation: 2.0 mm



### Art.-No.

S\_700249

### Quick release sagittal saw

Speed: 0 - 21000 cycles/min



### Art.-No.

S\_700250

### Sagittal saw

Speed: 0 - 18000 cycles/min



### Art.-No.

S\_700251

### **Reciprocating saw**

Speed: 0 - 12000 cycles/min



### Art.-No.

S\_700252

### Wire driver

Speed: 0 - 1100 rpm Cannulation: 0.6 - 1.8 mm

### Art.-No.

S\_700260

### Pin driver

Speed: 0 - 1100 rpm Cannulation: 1.8 - 3.2 mm



# SOPROCOMEG



### 7 • LCD DISPLAYS

| 26" HD surgical display  | <br> |  |  | <br> |  |  | <br>.p60 |
|--------------------------|------|--|--|------|--|--|----------|
| 24" HD surgical display  | <br> |  |  | <br> |  |  | <br>.p60 |
| 19" HD surgical display  | <br> |  |  | <br> |  |  | <br>.p61 |
| 19" diagnostic display . | <br> |  |  | <br> |  |  | <br>.p62 |
| 17" diagnostic display . | <br> |  |  | <br> |  |  | <br>.p62 |
| Accessories              |      |  |  |      |  |  | n63      |



### Foreseeson 26" HD surgical display

### **SPECIFICATIONS**

- Panel Type TFT LCD-IPS
- Max. Resolution 1920 x 1200
- Aspect ratio: 16:10
- Brightness 500cd/m2 (Typical)
- Contrast Ratio 1000:1 (Typical)
- Response time: (tr+tf)ms: 12
- Viewing Angle (U/D/L/R) 89/89/89
- Video inputs: HD/SD-SDI, RGBS, RGBHV, DVI, VGA, S- Video, Component, DVI, VGA, Fiber optic DVI,
- Dimensions (W x H x D) 618 x 412 x 99.5
- Weight 8.8 Kg
- Mounting: VESA & Table stand

| Art.N°   | Description                        |
|----------|------------------------------------|
| S_700207 | Foreseeson 26" HD surgical display |

### Regulatory

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

# BARCO MDSC-2124 24" HD surgical display

### Regulatory

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

### **SPECIFICATIONS**

- Viewing area (diagonal): 24" TFT AM LCD technology
- Viewing angle: 178° • Pixel pitch: 0.294 mm
- Resolution: (H x W): 1920 x 1200
- Luminance: 500 cd/m<sup>2</sup> • Contrast ratio: 1000:1
- Analog video input: RGBS, 1 composite video, S-video VGA
- Digital Video Input: DVI-1 & HD-SDI
- Video formats: From PAL 576i, HD-SDI & NTSC 480i to  ${\rm HDTV}\ resolution$
- Weight: 12 kg
- Mounting: VESA & Table stand

| Art.N°   | Description                                |
|----------|--|
| S_700090 | Barco MDSC- 2124 - 24" HD surgical display |

LCD displays



### BARCO MDSC-1119 19" HD surgical display

### **SPECIFICATIONS**

• Viewing area (diagonal): 19" - TFT AM LCD technology

• Viewing angle: 178° • Pixel pitch: 0.294 mm

• Resolution: (H x W): 1280 x 1024

• Luminance: 300 cd/m<sup>2</sup> • Contrast ratio: 700:1

• Analog video input: RGBS, 1 composite video, S-video VGA

• Digital Video Input: DVI-I & SD-SDI

• Video formats: From PAL 576i & NTSC 480i to HDTV resolution

• Weight: 8 kg

• Mounting: VESA & Table stand

| Art.N°   | Description                            |
|----------|--|
| S_700056 | Barco MDSC -1119, 19" surgical display |

• Electrical safety: Class 1

• Comply with the European standard 93/42/EEC -

• Comply with the international standards IEC 60601-1-1, 60601-1-2, CCC, FCC-B P CAN/CSA, ICES-001, VCCI Class B

Insufflators



Neovo 19" diagnostic display

### **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-SubDigital: 29-Pin DVI-D

• S-Video: 4-Pin Mini Din S-Video

• CVBS: CVBS Jack

Connector Power: 3-Pin AC PlugThickness: 3.0mm (0.18")

Reflection Rate: <1%</li>Transmission Rate: >96%

• Power: AC 100 - 240V, 50 - 60Hz

Consumption <48W (On) <4W (Stand-by) <2W (Off)</li>
Dimensions: (W x H x D) 444 x 419 x 175mm

• Weight: 7.9Kg

### Regulatory

- Safety & EMI FCC, UL/CUL, EPA,
- TUV/BAURT, CE, TCO 95,
- BSMI, ISO 13406-2, GOST

| Art.N°   | Description                           |
|----------|---------------------------------------|
| S_700030 | Diagnostic 19" NEOVO flat panel white |



### Neovo 17" diagnostic display

### **SPECIFICATIONS**

• Panel Type TFT LCD

• Max. Resolution: SXGA 1280 x 1024

• Pixel Pitch: 0.264 mm

Brightness: 300cd/m2 (Typical)Contrast Ratio: 3000:1 (DCR)

• Viewing Angle (H/V): 160°/160° (Typical)

• Video inputs: SDI, RGBS, S-Video, Composite, DVI, VGA

• Video cables: (S-Video, SDI, VGA, DVI)

• Frequency: (H/V) H: 30 kHz - 80 kHz V: 56 Hz - 75 Hz

• Power: AC-DC Adaptor

 Power Consumption: AC 100 - 240 V, 50 - 60 Hz < 42 W (on) < 2 W (Stand-by) < 1 W (Off)</li>

• Dimensions: (W x H x D) 408 x 398 x 175 mm

• Weight: 6.8 kg

### Regulatory • Safety &

- Safety & EMI FCC, UL/CUL, EPA,
- TUV/BAURT, CE, TCO 95,
- BSMI, ISO 13406-2, GOST



### Accessories

Art.-No. S\_703003

Medical-grade power supply for Diagnostic screens

Art.-No. S\_700057

Desktop Stand for 19" 24" and 26" with VESA mounting

Art.-No. S\_700279

Protection glass for 24 and 19" displays

# SOPROCOMEG



### 8 • ARCHIVING SYSTEMS

| 22" HD Point of care terminal       |
|-------------------------------------|
| 19" Point of care terminalp6        |
| Full HD portable recording systemp6 |
| USB key archiving systems           |
| Medical DVD Recorder                |



22" HD Point of care terminal

HD

Integrated touch screen and PC panel with video software management.

### SPECIFICATIONS OF THE SCREEN

• Plastic ABS

Display type: 22" TFT LCDMax. resolution: 1680 x 1050

• Max. colors: 16,7 M

Active area: 473,76 x 296,1 mmPixel pitch: 0,282 x 0,282 mm

Response time: 20 msBacklight: 6 CCFL

Backlight MFBF: 50.000 hrs
Contrast ratio: 1000 (TYP.)
Brightness (cd/m²): 300 nits

• Fanless tactile 250

• Lock type external 12V AC / DC medical grade power adapter

Thickness: resistive 3.2 mm
Light transmission: resistive 80%

• Power: resistive +5V - 100 mA

Consumption touch life: resistive 35 millions touches, controller interface RS-232, D-type 9-pin male connector or USB connector

### Regulatory

• UL60601-1, EN60601-1, CE & FCC Class B certified

### **SPECIFICATIONS OF THE SOFTWARE**

- Image and video captures in HD formats
- Jpeg, mjpeg, mpeg4 HD compression
- Native or Dicom export on server or portable supports (DVD, USB...)
- Report with specific user environment: title, list of comments, export directory, writer identification...
- Double screen and multi windows management
- Connection to the information system (Dicom worklist and Broker HL7 option)
- Negatoscope and more options available on request
- SDI input with automatic recognition of the resolution (PAL, ..., 1080p60)
- Source selector

### Input signal

• HD-SDI, VGA, RGB analog 0.7v peak-to-peak

• Touchscreen: serial RS-232 or USB

• Audio-in

• 3 USB (1 slave, 2 host)

### I/O connectors

- 1 X BNC with SDI loop
- 3 X RS 232
- 1 X VGA out (double écran up to 2560 x 2048)
- 2 X Eth Gb
- 4 X USB

| Art.N°   | Description   |
|----------|---|
| S_700280 | 22" HD Point of care terminal                         |
| S_700057 | Desktop Stand for 19", 24" and 26" with VESA mounting |



### **SPECIFICATIONS OF THE SCREEN**

- Max. Resolution 1280 x 1024
- Max. Colors 16.7M
- Dot size (mm) 0.264 x 0.264
- Viewing angle 178/178°
- Luminance 300 cd/m2
- Contrast ratio 1300 : 1
- LCD MTBF 50,000 hours
- Backlight lifetime 50,000 hours
- Type Analog Resistive
- Resolution Continuous
- Light transmission 75%
- Controller RS-232 interface (use COM4)
- 1 x RS-232 and 1 x RS232/422/485 serial port; 2 x USB ports; 1 x PS/2 mouse and K/B; 1 x D-sub VGA port
- 2 x 1 W speakers; 1 x MIC-in and Speaker-out
- Universal AC/DC adapter (Sinpro Model no. MPU100-108)
- Input voltage 100 ~ 240 VAC, 47 ~ 63 Hz, 1.25 ~ 0.5 A
- Output voltage +24 VDC, 4.16 A max. (100 watts)
- Durability 30 million touches
- Dimensions (W x H x D) 471.5 x 416.2 x 110.8 mm
- Weight 10 kg

### Regulatory

• UL60601-1/EN60601-1, CE & FCC Class B certified

| Art.N°   | Description   |
|----------|---|
| S_700281 | 19" Point of care terminal                            |
| S_700057 | Desktop Stand for 19", 24" and 26" with VESA mounting |

### **SPECIFICATIONS OF THE SOFTWARE**

- Source selector
- Image and video captures
- Jpeg, mjpeg, mpeg4 compression
- Native or Dicom export on server or portable supports (DVD, USB...)
- Report with specific user environment: title, list of comments, export directory, writer identification...
- Double screen and multi windows management
- Connection to the information system (Dicom worklist and Broker HL7 option)
- Negatoscope and more options available on request
- SDI input with automatic recognition of the resolution (PAL, ...., 1080p60)





### HD

### **SPECIFICATIONS**

- $\bullet$  Full HD video capture (1920 x 1080) with exceptional color
- Digital recording in a compatible H.264 format on SDHC memory cards
- Remote control by camera
- Up to 12 hours on a single 32GB card.
- Direct random access playback on compatible Blu ray players, displays and PCs.
- Content files can be transferred to a PC via USB 2.0 Terminal
  - This lets a Windows PC/Mac installed with the provided AVCCAM Viewer software to ingest, copy, and write HD video files, as well as transfer them to AVCHD-compatible nonlinear editing software for HD image production.
- Monitor Connection HDMI Output Terminal The AG-MDR15 series let you input audio from external microphones (the stereo mini jacks). When the optional AG-MDC10G camera head is connected, audio recording is also possible from the stereo microphones built into the camera head. In either case, it's easy to adjust the audio input with the level meters displayed on the LCD monitor.
- Recording format: AVCHD
- Compression Method: MPEG-4AVC/H.264
- SDHC Memory card: up to 32GB (FAT32)
- Thumbnail View: 8 frames/page

- Editing functions: delete, write-project
- HD-SDI Input, BNC x 1,0.8 Vp-p,75Ω
- HD-SDI/SD-SDI Output, BNC x 1, 0.8 Vp-p, 75Ω
- HDMI output x 1 (HDMI Type A Terminal) up to 1080/60i
- Compression bit-rate: PH Mode: 384 kbps, HA, HG and HE mode: 256 kbps
- External Microphone input: -70 dBV (Mic sensitivity: -50 dB equivalent, O bB=1 V/Pa 1kHz)
- Stereo mini jack(3.5mm diameter) (Not compatible with plug-in power microphone)
- Headphone input: Stereo mini jack(3.5mm diameter) x 1
- Built-in Speaker: 20mm (round) x1
- Camera remote: Super mini-jack (2.5mm diameter) x 1, for start/stop operations
- LCD monitor: 3.5 inches, LCD color monitor, Approx. 210,000 pixels
- Standard accessories: AC adapter/charger, 2640 mAh battery pack (secure type), AC cable, DC cable( catch type), CD-ROM, AVCCAM Restorer (Windows PC/MAC)
- Weight: approx. 580g excluding battery and accessories, approx. 691g included bundled battery
- Dimensions: (WxHxD): 96 x52.6x133mm
- Power supply: 7.3 V (using with AC adapter)
- Power consumption: 11.7W (with option)
  - 6.5W (in standalone conditions)

### Regulatory

• UL 60601-1, EN 60601-1, EMC requirements in accordance with IEC 60601 - 1-2 (EN 60601-1-2)

| Art.N°   | Description                             |
|----------|---|
| S_700282 | Full HD operating room recording system |

### **USB** Key archiving systems



### **SPECIFICATIONS OF M-USB-300**



- HD Medical Video Recorder
- Records high-definition video and still images from medical video sources to internal hard drive or external USB drive
- LCD Monitor: 2 1/2", full color (for video confirmation only, not for diagnosis)
- Buttons: sealed membrane, fluid resistant
- USB Support: USB2.0 high speed
- 1 front connector, 2 rear connectors
- Networking RJ45 10/100/1000 Ethernet
- Footswitch
- Trigger Standard 3.5mm mini jacks (one for photos, one for videos)
- External Media USB flash drives or USB hard drive
- Video Formats H.264 / MPEG4 (1080, 720, NTSC, PAL)
- Image Formats JPG, BMP
- Video Input DVI (RGB via adapter), HD, SDI, S-Video, Composite
- Internal hard drive, 320GB
- Size: 240 x 211 x 63mm
- Weight: 1.8kg
- Power supply: (110-230 VAC~; 50 -60Hz)
- 3-prong AC jack

| Art.N°   | Description                                  |
|----------|--|
| S_700211 | M-USB 300 for full HD video and still images |
| S_009002 | Foot remote control                          |



• UL 60601-1, IEC 60601-1, IEC 60601-1-2 • CSA C22.2 No.601.1, E 306417 • FCC Part 15, FDA Class 1, RoHS, PSE

### • Medical video and image capture device.

- LCD Monitor 2 1/2", full color (for navigation only, not for diagnosis)
- Buttons sealed membrane, fluid resistant

**SPECIFICATIONS OF M-USB-200** 

- Video PAL or NTSC (menu selection)
- S-video or composite BNC connections for both input and output
- Foot Switch Hands-free capture
- Standard 3.5mm mini jack
- Media MediCapture brand USB flash drives (required)
- Image Formats JPEG, TIFF, or PNG (upgrade required for DICOM)
- Image Size 1024 x 768, 800 x 600, 640 x 480 pixels
- Video Format MPEG2 (DVD-quality) or MPEG1
- Size: 240 x 200 x 63mm
- Weight: 1.5kg
- Power supply: (110-230 VAC~; 50 -60Hz)

### Regulatory

Regulatory • CE 93/42/EEC

- CE 93/42/EEC
- UL 60601-1, IEC 60601-1, IEC 60601-1-2
- CSA C22.2 No.601.1, E 306417
- FCC Part 15, FDA Class 1, RoHS, PSE

| Art.N°   | Description                         |
|----------|-------------------------------------|
| S_700091 | M-USB200 for video and still images |
| S_009002 | Foot remote control                 |



### **Medical DVD 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

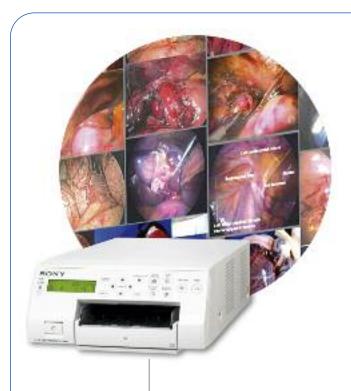
### Regulatory

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

Art.N° Description S\_700077 Medical DVD recorder

# SOPROCOMEG

# SOPROCOMEG



### 9 • PRINTER

UP-25MDSYN Color video printer .....p74



### **UP-25MDSYN Color video printer**

### **SPECIFICATIONS**

- HDTV signal support 1080i and 720p automatically
- Printing Method: Dye Sublimation Thermal Printing
- Resolution: 423 DPI
- PAL & NTSC compatible, all standard interfaces
- RS-232 Control
- Gradation: YMC images using 8 bit/256 gradations per color, approx
- Interface: RGB/YPbPr (BNC X 3) S Video (4-pin min-DIN X 1)
   Composite Video (BNC X 1)
- Print Media: UPC-21L (L size standard color print pack)
   (4 x 50 packs) / UPC-21S (S size standard color print pack)
   (3 x 80 packs) / UPC-24SA (S size Laminated color print pack)
   (3 X 60 packs) / UPC24LA (L size Laminated color print pack)
   (4 X 40 packs)
- Print Size: UPC-21L/UPC-24LA Size: Full 5 X3 3/4"
- UPC-21S/UPC-24SA Size: Full 3 3/4 X 2 7/8"
- Print Speed: NTSC: UPC-21S approx. 19 sec. (high speed mode) UPC-21L approx. 29 sec.
- Paper Tray Capacity: S Size tray: Max. 80 sheets L Size tray: Max 50 sheets
- Power supply: (110-230 VAC~; 50 -60Hz)
- Input Current: 1.7-1.0 A
- Dimensions: 212 x 98 x 398 mm
- Weight: 5.7kgs

Art.N° Description

S\_700262 UP-25MDSYN Color video printer

### Regulatory

• UL 1950 and UL 2601-1 Listed / CSA . C22.2 No. 601.1 / No. 950 / EN60950 / EN60601-1

### Art.-No.

S 700076

### UPC-21L - A6 Large-size color print pack for use in UP-25MDSYN printer

Pack contents: 200 sheets of print media, 4 color ink ribbons

Order unit: 1 pack



### 10 • MEDICAL CARTS

| Premium carts |  |  |  |  |  |  |  |  |  |  |  |  |  |  | .p78 | 3 |
|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|---|
| Basic carts   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | .p70 | 7 |

**SPECIFICATIONS** 

• 1x Adjustable shelf • 1x Drawer

### Premium cart with long and short arms



### Premium cart with long arm



### Basic cart with fixed screen + short arm

### **SPECIFICATIONS**

- 1x Adjustable shelf
- 1x Drawer
- 1x Extension tube 300mm for arm
- 1 x articulated short arm
- 1x Fixed arm for flat panel mount
- 1x 5m Careflex Power Cord
- 4x 60cm connection power cables
- 1x Holder for monitor power adapter
- 6x Counterweight 5mm
- 1x CO2 bottle holder



Art.N° Description

S\_700277 Basic cart with fixed screen and short arm

### Basic cart with fixed screen

### **SPECIFICATIONS**

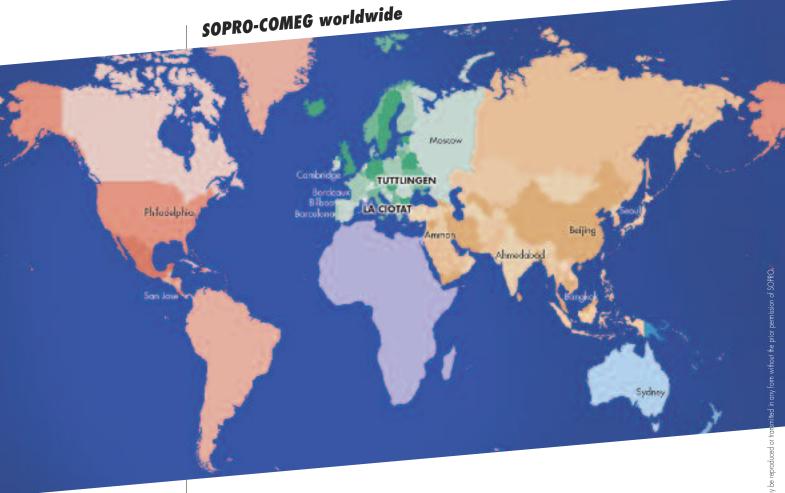
- 1x Adjustable shelf
- 1x Drawer
- 1x Extension tube 300mm for arm
- 1x Fixed arm for flat panel mount
- 1x 5m Careflex Power Cord
- 4x 60cm connection power cables
- 1x Holder for monitor power adapter
- 1x CO2 bottle holder



| Art.N°   | Description                  |
|----------|------------------------------|
| S 700278 | Basic cart with fixed screen |

| <br> |  |
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| Notes |
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### **SOPRO-COMEG COMMITMENTS**

### **Customer proximity**

Direct and quick communication with our local sales force.

National placed inventory to ensure quick delivery time.

### **Service**

Worldwide service centres to ease and fasten the support of our complete product line.

### R&D

A network of 50 engineers to foster on products innovations and new technologies.





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German production plant