



UNITS
GERÄTE



CAMERAS



Please note that coupler has to be ordered separately (see page 16-5)

16-2008PAL	Economy 1CCD camera, 1/3" chip, PAL version
16-2008NTSC	Economy 1CCD camera, 1/3" chip, NTSC version

- Including**
- C-Mount camera head with cable (3 m)
 - BNC cable
 - Y/C cable
 - Power cord
 - Operating Manual

Technical Data	
Resolution	752 x 582 PAL; 768 x 494 NTSC
Definition	825 lines
Sensitivity	0,9 lux
Signal / Noise ratio	64 dB
Electronic shutter	1/100 000 sec.
White Balance	Automatic push
Cable length	3.0 meters
Outputs	1 x Y/C / 1 x BNC
Size of the control unit	300 x 300 x 66 mm
Weight of the control unit	2,5 kg
Main voltage	115 - 230 VAC
Power consumption	25 VA
Frequency	50 - 60 Hz
Fuses	2 x T 800 mA - 250 V
Standards	Classification 93/42 EG
	Protection Class 1
	Type BF
	IEC 601.1, IEC 601.1.2
	MPG

- Features**
- > Electronic shutter for camera controlled brightness regulation
 - > Noise free image resolution
 - > HAD chip technology (Hyper Active Digital)
 - > No flickering image or loss of signal data due to digital processing
 - > Easy and safe handling due to user friendly design and function
 - > One hand quick focusing
 - > For left and right hands use
 - > Aperture and boost function
 - > Automatic white balance
 - > Water proof camera head

CAMERAS



Please note that coupler has to be ordered separately (see page 16-5)

Technical Data	
Resolution	752 x 582 PAL; 768 x 494 NTSC
Definition	855 lines
Sensitivity	0,23 lux
Signal / Noise ratio	49 dB
Electronic shutter	1/100 000 sec.
Auto exposure	5 window areas
White Balance	Automatic push
Video enhancement	Yes
Cable length	3,6 meters
Outputs	2 x Y/C / 2 x BNC
Size of the control unit	300 x 300 x 66 mm
Weight of the control unit	2,5 kg
Main voltage	115 - 230 VAC
Power consumption	25 VA
Frequency	50 - 60 Hz
Fuses	2 x T 800 mA - 250 V
Standards	Classification 93/42 EG
	Protection Class 1
	Type BF
	IEC 601.1, IEC 601.1.2
	MPG
	IPX 0

16-2010PAL	1CCD camera, 1/3"chip, PAL version
16-2010NTSC	1CCD camera, 1/3"chip, NTSC version
16-2010DV-PAL	1CCD camera, 1/3"chip, PAL version, with DV output (Firewire)
16-2010DV-NTSC	1CCD camera, 1/3"chip, NTSC version, with DV output (Firewire)

Including

- C-Mount camera head with cable (3,6 m)
- BNC cable
- Y/C cable
- Firewire connection cable (on DV models only)
- Power cord
- Operating Manual

Features

- > Electronic shutter for camera controlled brightness regulation
- > Noise free image resolution
- > HAD chip technology (Hyper Active Digital)
- > No flickering image or loss of signal data due to digital processing
- > Easy and safe handling due to user friendly design and function
- > One hand quick focusing
- > For left and right hands use
- > Many parameters (like brightness, aperture, red shift, blue shift etc.) can be adjusted via on-screen-menu.
- > 10 different users can save their own settings
- > Programmable buttons on the camera head
- > Automatic white balance
- > Water proof camera head



CAMERAS



16-2011PAL	3CCD camera, 1/4" chip, PAL version
16-2011NTSC	3CCD camera, 1/4" chip, NTSC version
16-2011DV-PAL	3CCD camera, 1/4" chip, PAL version, with DV output (Firewire)
16-2011DV-NTSC	3CCD camera, 1/4" chip, NTSC version, with DV output (Firewire)

Including	
-	C-Mount camera head with TV coupler and cable (3,6 m)
-	RGB cable
-	BNC cable
-	Y/C cable
-	Firewire connection cable (on DV models only)
-	Power cord
-	Operating Manual

Technical Data	
Resolution	3 x 752 x 582 PAL; 3 x 768 x 494 NTSC
Definition	1155 lines
Sensitivity	0,18 lux
Signal / Noise ratio	60 dB
Electronic shutter	1/100 000 sec.
Auto exposure	Variable
White Balance	Automatic push
Video enhancement	Yes
Cable length	3,6 meters
Outputs	1 x RGB / 1 x Y/C / 1 x BNC
Size of the control unit	300 x 300 x 66 mm
Weight of the control unit	2,5 kg
Main voltage	115-230 VAC
Power consumption	25 VA
Frequency:	50 - 60Hz
Fuses	2 x 800 mA - 250 V
Standards	Classification 93/42 EG
	Protection Class 1
	Type BF
	IEC 601.1, IEC 601.1.2
	MPG
	IPX 0

Features
> Electronic shutter for camera controlled brightness regulation
> Noise free image resolution
> HAD chip technology (Hyper Active Digital)
> No flickering image or loss of signal data due to digital processing
> Easy and safe handling due to user friendly design and function
> One hand quick focusing
> For left and right hands use
> Many parameters (like brightness, aperture, red shift, blue shift etc.) can be adjusted via on-screen-menu.
> 10 different users can save their own settings
> Programmable buttons on the camera head
> Automatic white balance
> Water proof camera head



TV COUPLER



15-1702CLD-15	TV coupler	F = 15 mm
15-1702CLD	TV coupler	F = 23 mm
15-1702CLD-26	TV coupler	F = 26 mm
15-1702CLD-28	TV coupler	F = 28 mm



15-1702ZM	Zoom TV coupler	F = 25-40 mm
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15-1705	Beam splitter	F = 25 mm
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VIDEO LAPAROSCOPE



16-2032PAL	Video Laparoscope 10mm 0°, PAL Version
16-2032NTSC	Video Laparoscope 10mm 0°, NTSC Version

Including	
-	BNC cable
-	Y/C cable
-	Power cord
-	Operating Manual

Technical data	
Diameter	10 mm
Direction of view	0°
Working length	350mm
Image Sensor	1CCD 1/4"
Resolution	752 x 582 PAL; 768 x 454 NTSC
Definition	520 Lines
Outputs	1 x Y/C / 1 x BNC
Signal / Noise Ratio	> 46 dB
High-Speed-Shutter	max. 1/100.000 sec
White balance	Automatic push
Illumination	Standard : 2.500 lux F8 (3.000K)
	Minimum : 3 lux / F 1.4 (AGC on)
Main voltage	115 – 230 VAC
Power consumption	20 W
Frequency	50 - 60 Hz
Fuses	2 x T 2 A – 250 V
Weight control unit	2,5 kg
	Scope: 500g
Dimensions	Control unit 60 x 300 x 300 mm
Standard camera cable	3 m
Protection class	I
Classification	BF without function group
	with 1 Patient circuit
Test standard	IEC 601-1, IEC 601-1-2, MPG

Features	
>	Chip-on-tip technology provides a rod-lens-free image
>	The optical quality has reached a new level, due to dramatically reduced number of optical interfaces
>	Provides a brilliant depth of focus
>	Extremely bright picture
>	Excellent sharpness of the picture
>	Very good reproduction of the colour and a high contrast
>	Modular system
>	Fully autoclavable

LIGHT SOURCES



16-2023

2 x 250 W Halogen light source

Including

- Power cord
- Operating Manual

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Technical data

Type of lamp	Halogen lamp
Performance	2 x 250 W
Colour temperature	3200° Kelvin
Lamp lifetime:	50 hours (Average value at: 30 min. ON and 15 min. OFF)
Light cable connection	Storz/Ackermann (others on request)
Electrical requirements	105 or 230 V ~ / 50 or 60 Hz (manual switch on the rear panel)
Power Consumption	maximum 270 VA
Dimensions	300 x 311 x 90 mm
Weight	3,9 kg
Fuses	2 x T 4A
Temperature range:	+10°C to +35°C - in function
Max. relative air humidity	85% - in function
Temperature range:	-20°C to +45°C - in storage
Max. relative air humidity	85% in storage
Electr. protection class	(IPX0) Not protected against water
CE standard	Conform to the European directive 93/42/CEE
Safety measurements	Not adapted to a use close to a mixture of inflammable anaesthetic with air, oxygen or nitrous oxide

Features

- > In case of malfunction of one lamp you can easy changeover to the second lamp by an ergonomic front switch.
- > Mechanical iris = constant colour temperature
- > Simple and fast lamp change



LIGHT SOURCES



16-2020 100 W Xenon light source

Including

- Power cord
- Operating Manual

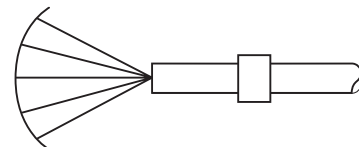
Technical Data

Type of lamp	Xenon lamp
Performance	100 W / comparable with 300 W
Lamp geometry	Ackermann® Xenon lamp with focusing mirror
Colour temperature	6000° Kelvin
Light cable connection	Ackermann (Wolf, Olympus with other adapters)
Lamp life time	500 hours (Av. value: 30 min ON / 15 min. OFF)
Main voltage	100 - 230 VAC
Power consumption	260 VA
Frequency	50 - 60 Hz
Fuses	2 x T 4A
Dimensions	300 x 311 x 125 mm
Weight	5,0 kg
Temperature range	+10° C to +40° C - in function
Max. relative air humidity	85% - in function
Temperature range	-20° C to +45° C - in storage
Max. relative air humidity	85% - in storage
Classification	CF (cardiac floatation)
Electr. protection class	IPX0, not protected against waterfalls
CE standard	Conform to the European directive 93/42/CEE
Safety measurements	Not adapted to a use close to a mixture of inflammable anaesthetic with air, oxygen or nitrous oxide

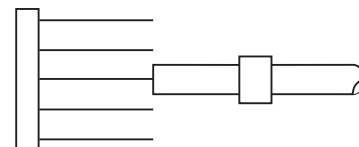
Features

- > Manual increase and decrease of light intensity
- > Stand by function to protect the lamp for longer life
- > Power on/off LED indicator
- > LCD display for the technical functions
- > Mechanical iris = constant colour temperature
- > Indication of the minimal and maximal levels of light
- > Continuous service
- > All Electromagnetic Compatibility (EMC) requirements were hold into account in the development of this light source.
- > Simple and fast lamp change

High focus light equivalent to 300 W light sources due to parabolic mirror focusing the light.



Competitors (no focus)



LIGHT SOURCES



16-2021

180 W Xenon light source

Including

- Power cord
- Operating Manual

16

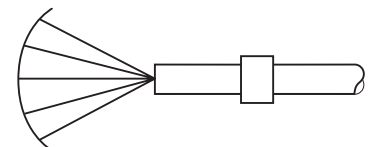
Technical Data

Type of lamp	Xenon lamp
Performance	180 W / comparable with 600 W
Lamp geometry	Ackermann® Xenon lamp with focusing mirror
Colour temperature	6000° Kelvin
Ligth cable connection	Ackermann (Wolf, Olympus with other adapters)
Lamp life time	500 hours (Av. value: 30 min ON / 15 min. OFF)
Main voltage	100 - 230 VAC
Power consumption	260 VA
Frequency	50 - 60 Hz
Fuses	2 x T 4A
Dimensions	300 x 311 x 125 mm
Weight	5,0 kg
Temperature range	+10° C to + 40° C - in function
Max. relative air humidity	85% - in function
Temperature range	-20° C to +45° C - in storage
Max. relative humidity	85% - in storage
Classification	CF (cardiac floatation)
Electr. protection class	IPX0, not protected against waterfalls
CE standard	Conform to the European directive 93/42/CEE
Safety measurements	Not adapted to a use close to a mixture of inflammable anaesthetic with air, oxygen or nitrous oxide

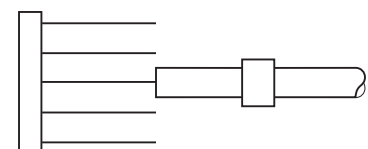
Features

- > Manual increase and decrease of light intensity
- > Stand by function to protect the lamp for longer life
- > Power on/off LED indicator
- > LCD display for the technical functions
- > Mechanical iris = constant colour temperatur
- > Indication of the minimal and maximal levels of light
- > Continuous service
- > All Electromagnetic Compatibility (EMC) requirements were hold into account in the development of this light source.
- > Simple and fast lamp change

High focus light equivalent to 600 W light sources due to parabolic mirror focusing the light.



Competitors (no focus)





LIGHT SOURCES



16-2022 300 W Xenon light source

Including

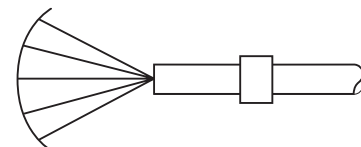
- Power cord
- Operating Manual

Technical Data	
Type of lamp	Xenon lamp
Performance	300 W / comparable with 900 W
Lamp geometry	Ackermann® Xenon lamp with focusing mirror
Colour temperature	6200° Kelvin
Ligth cable connection	Ackermann (Wolf, Olympus with other adapters)
Lamp life time	500 hours (Av. value: 30 min ON / 15 min. OFF)
Main voltage	100 - 230 VAC
Power consumption	260 VA
Frequency	50 - 60 Hz
Fuses	2 x T 4A
Dimensions	300 x 311 x 125 mm
Weight	5,0 kg
Temperature range	+10° C to + 40° C - in function
Max. relative air humidity	85% - in function
Temperature range	-20° C to +45° C - in storage
Max. relative air humidity	85% - in storage
Classification	CF (cardiac floation)
Electr. protection class	IPX0, not protected against waterfalls
CE standard	Conform to the European directive 93/42/CEE
Safety measurements	Not adapted to a use close to a mixture of inflammable anaesthetic with air, oxygen or nitrous oxide

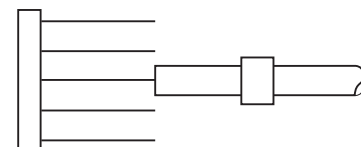
Features

- > Manual increase and decrease of light intensity
- > Stand by function to protect the lamp for longer life
- > Power on/off LED indicator
- > LCD display for the technical functions
- > Mechanical iris = constant colour temperature
- > Indication of the minimal and maximal levels of light
- > Continuous service
- > All Electromagnetic Compatibility (EMC) requirements were hold into account in the development of this light source.
- > Simple and fast lamp change

High focus light equivalent to 900 W light sources due to parabolic mirror focusing the light.



Competitors (no focus)





LAPAROSCOPY INSUFFLATOR



16-2040N Insufflator 20 L

- Including**
- 4 pcs. disposable Y-tubing set fitted with a viral filter
 - Open-end spanner
 - Power cord
 - Operating Manual

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Technical Data	
Main voltage	100-240 VAC
Power consumption	40 VA
Frequency	50 – 60 Hz
Fuses	2 x 2,5 AT – 250 V time-lag fuses - UR
Dimensions	300 x 340 x 145 mm
Weight	5 kg
Max. gas flow	20 L
Pressure selection	0 – 24 mmHg (accuracy of 1 mmHg)
Temperature range	+10°C to +40°C - in function
Max. relative air humidity	30 to 75 % - in function
Temperature range	+10°C to +40°C – in storage
Max. relative air humidity	20 to 85 % - in storage
Standards	Classification 93/43 EG
	Protection Class 1
	Type BF
	IEC 601.1
	MPG
	IPX 0

Features

- > **Inbuilt gas pre-heating system**
- > **External desufflation valve to avoid cross-contamination**
- > **Pressure controlled insufflation**
- > **Large display showing all the important measures during operation**
- > **Bottle pressure monitoring**
- > **Adjustment and pre-selection possibilities**

Accessories

16-2040-2000	High pressure hose with US bottle connection
16-2040-2001	High pressure hose with DIN bottle connection
16-2040-2002	High pressure hose with Pin Index bottle connection
16-2040-100YD	Disposable Y-Tubing set with viral filter (10 pcs.)



LAPAROSCOPY INSUFFLATOR



16-2041N

Insufflator 30 L

Including

- 4 pcs. disposable Y-tubing set fitted with a viral filter
- Open-end spanner
- Power cord
- Operating Manual

Technical Data

Main voltage	100-240 VAC
Power consumption	40 VA
Frequency	50 – 60 Hz
Fuses	2 x 2,5 AT – 250 V time-lag fuses - UR
Dimensions	300 x 340 x 145 mm
Weight	5 kg
Max. gas flow	30 L
Pressure selection	0 – 24 mmHg (accuracy of 1 mmHg)
Temperature range	+10°C to +40°C - in function
Max. relative air humidity	30 to 75 % - in function
Temperature range	+10°C to +40°C – in storage
Max. relative air humidity	20 to 85 % - in storage
Standards	Classification 93/43 EG
	Protection Class 1
	Type BF
	IEC 601.1
	MPG
	IPX 0

Features

- > **Inbuilt gas pre-heating system**
- > **External desufflation valve to avoid cross-contamination**
- > **Pressure controlled insufflation**
- > **Large display showing all the important measures during operation**
- > **Bottle pressure monitoring**
- > **Adjustment and pre-selection possibilities**

Accessories

16-2040-2000	High pressure hose with US bottle connection
16-2040-2001	High pressure hose with DIN bottle connection
16-2040-2002	High pressure hose with Pin Index bottle connection
16-2040-100YD	Disposable Y-Tubing set with viral filter (10 pcs.)



LAPAROSCOPY INSUFFLATOR



16-2042N Insufflator 45 L

- Including**
- 4 pcs. disposable Y-tubing set fitted with a viral filter
 - Open-end spanner
 - Power cord
 - Operating Manual

16

Technical Data	
Main voltage	100-240 VAC
Power consumption	40 VA
Frequency	50 – 60 Hz
Fuses	2 x 2,5 AT – 250 V time-lag fuses - UR
Dimensions	300 x 340 x 145 mm
Weight	5 kg
Max. gas flow	45 L
Pressure selection	0 – 24 mmHg (accuracy of 1 mmHg)
Temperature range	+10°C to +40°C - in function
Max. relative air humidity	30 to 75 % - in function
Temperature range	+10°C to +40°C – in storage
Max. relative air humidity	20 to 85 % - in storage
Standards	Classification 93/43 EG
	Protection Class 1
	Type BF
	IEC 601.1
	MPG
	IPX 0

Features

- > **Inbuilt gas pre-heating system**
- > **External desufflation valve to avoid cross-contamination**
- > **Pressure controlled insufflation**
- > **Large display showing all the important measures during operation**
- > **Bottle pressure monitoring**
- > **Adjustment and pre-selection possibilities**

Accessories

16-2040-2000	High pressure hose with US bottle connection
16-2040-2001	High pressure hose with DIN bottle connection
16-2040-2002	High pressure hose with Pin Index bottle connection
16-2040-100YD	Disposable Y-Tubing set with viral filter (10 pcs.)



HYSTEROSCOPY INSUFFLATOR



15-1731 Hystero-Insufflator

Including

- Disposable insufflation hose
- Silicone insufflation tube
- Luer Lock connector
- Hydrophobic sterile filter (2 pcs.)
- Open-end wrench set
- Power cord
- Operating manual

Technical Data

Main voltage	100-240 VAC
Power consumption	60 VA
Frequency	50 - 60 Hz
Safety class	1
Dimensions	320 x 300 x 145 mm
Weight	5 kg
Max. gas flow	0 - 100 ml/min (CO ₂)
Pressure selection	0 - 150 mm Hg
MedGeVO-Group	3
Standards	Made of UL listed components VDE 0750/IEC 601, GS/TÜV, CE

Features

- > The Hystero-Insufflator is used for safe distension of the uterine cavity.
- > The unit is based on the results of many clinical studies and was developed in close collaboration with eminent gynecologists.
- > The use of state-of-the-art microprocessor technology and sensor systems are further advantages of this unit.
- > The unit is very simple to use, due to the direct digital selections of the required pressure and flow rate. An "intelligent" control system regulates and monitors these parameters.
- > Absolute safety is achieved by the electronic and mechanical safety features, which monitor each other (redundant safety).
- > Continuous insufflation without pulsation.
- > Gas pressure and gas flow are separately adjustable.
- > Ergonomic layout of displays and controls, in combination with self-explanatory graphical readouts, allow intuitive operation.
- > Compact system size offers mechanical stability and shielding against RF interference as well as attachment options for various accessories.



UROLOGY IRRIGATION PUMP



15-1715 UroSurgiSystem

Including

- Autoclavable tubing set
- Autoclavable measuring chamber
- Autoclavable membrane protector
- Power cord
- Operating manual

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Technical Data

Main voltage	100 - 240 VAC
Power consumption	60 VA
Frequency	50-60 Hz
Device type	BF
Safety class	II a
Dimensions	300 x 260 x 93 mm
Weight	5 kg
Casing safety standard	IPX 1
Flow rate	0 - 1000 ml/min
Pressure range	10-150 mm Hg
Temperature range	+10 to +40° C
Humidity	30% - 70%
Standards	in accordance with DIN IEC 601/1, EN 55011 (CISPR); EN 50082, parts 1 + 2 CE 0297

Features

- > **Touch free pressure measurement**
- > **Leakage liquid compensation**
- > **Preselection of pressure and flow**
- > **Continuous pressure roller pump system**

Accessories

15-1720-100	Tubing set autoclavable
15-1720-300	Tubing set disposable (10 pcs.)
15-1720-500	Measuring chamber autoclavable (10 pcs.)
15-1720-700	Membrane protector autoclavable (10 pcs.)



HYSTEROSCOPY IRRIGATION PUMP



15-1719 HysteroSurgiSystem

Including

- Autoclavable tubing set
- Autoclavable measuring chamber
- Autoclavable membrane protector
- Power cord
- Operating manual

Technical Data

Main voltage	100 - 240 VAC
Power consumption	60 VA
Frequency	50-60 Hz
Device type	BF
Safety class	II a
Dimensions	300 x 260 x 93 mm
Weight	5 kg
Casing safety standard	IPX 1
Flow rate	0 - 500 ml/min
Pressure range	10-200 mm Hg
Temperature range	+10°C to +40°C
Humidity	30% - 70%
Standards	in accordance with DIN IEC 601/1, EN 55011 (CISPR); EN 50082, parts 1 + 2 CE 0297

Features

- > **Touch free pressure measurement**
- > **Leakage liquid compensation**
- > **Preselection of pressure and flow**
- > **Continuous pressure roller pump system**

Accessories

15-1720-100	Tubing set autoclavable
15-1720-300	Tubing set disposable (10 pcs.)
15-1720-500	Measuring chamber autoclavable (10 pcs.)
15-1720-700	Membrane protector autoclavable (10 pcs.)



ARTHROSCOPY IRRIGATION PUMP



15-1720 ArthroSurgiSystem

Including

- Autoclavable tubing set
- Autoclavable measuring chamber
- Autoclavable membrane protector
- Power cord
- Operating manual

16

Technical Data

Main voltage	100 - 240 VAC
Power consumption	60 VA
Frequency	50-60 Hz
Device type	BF
Safety class	II a
Dimensions	300 x 260 x 93 mm
Weight	5,0 kg
Casing safety standard	IPX 1
Flow rate	0 - 1500 ml/min
Pressure range	10-150 mm Hg
Temperature range	+10 to +40° C
Humidity	30% - 70%
Standards	in accordance with DIN IEC 601/1, EN 55011 (CISPR); EN 50082, parts 1 + 2, CE 0297

Features

- > **Touch free pressure measurement**
- > **Leakage liquid compensation**
- > **Preselection of pressure and flow**
- > **Continuous pressure roller pump system**

Accessories

15-1720-100	Tubing set autoclavable
15-1720-300	Tubing set disposable (10 pcs.)
15-1720-500	Measuring chamber autoclavable (10 pcs.)
15-1720-700	Membrane protector autoclavable (10 pcs.)



LAPAROSCOPY SUCTION/IRRIGATION PUMP -FOR USE WITH IRRIGATION BAGS-



16-2080 Double roller pump

Including

- Silicone suction/irrigation tubing set, non sterile, autoclavable
- Suction/irrigation cannula diam. 5 mm / 10 mm, autoclavable
- Adapter duct, autoclavable
- Pneumatic manual control with double-lumen control tube autoclavable
- Fuses
- Power cord
- Operating manual

Technical Data

Frequency	50-60 Hz
Power consumption	36 VA
Device typ	BF
Main voltage	100 - 240 VAC
	Mains fuse T3, 15 A
Safety class	Ila
Construction	DIN EN 60601-1 (03.1996)
Radio interference suppression	DIN EN 60601-1-2 (10.2002)
Irrigation capacity	0 – 3.000 ml/min
Suction capacity	0 – 3.000 ml/min
Max. pressure	0 – 1.000 mm Hg
Temperature range	+10 to +40°C
Humidity	30 to 70%
Protection against sprinkler water	IPX 1
Certificates	CE
Dimensions (w x h x d)	300 mm x 93 mm x 260 mm
Weight	approx. 6.5 kg

Features

- > The device, a suction-irrigation pump without pressure monitoring is used in minimal invasive surgery.
- > It can be utilized in all areas of endoscopic surgical operation procedures where the body cavities are not completely filled with fluid and where the volume of rinsing fluid is small in proportion to the volume of the anatomical cavity.
- > The pump system is well suited for utilization in the abdomen and in the thorax.

Accessories

16-2080-100	Autoclavable tubing set
16-2080-1000	Pneumatic double footswitch
16-2080-200	Pneumatic manual control, autoclavable
16-2080-201	Suction/Irrigation cannula 5 mm
16-2080-202	Suction/Irrigation cannula 10 mm
16-2080-203	Adapter duct, autoclavable
16-2080-204	Double lumen control tube, autoclavable



LAPAROSCOPY SUCTION/IRRIGATION PUMP -FOR USE WITH IRRIGATION BOTTLES-



15-1730	Suction/irrigation pump (240 VAC)
15-1730-110V	Suction/irrigation pump (100 VAC)

Including	
-	Bottle holder for 2 L suction receptacle
-	Bottle holder for 1 L rinsing bottle
-	Reusable 2 L suction receptacle
-	2 Sterile filters with LL-connectors at both sides
-	Puncture tube
-	Autoclavable tubing set
-	Power cord
-	Operating manual

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Technical Data	
Main voltage	100 or 240 VAC
Power consumption	120 VA
Frequency	50 - 60 Hz
Safety class	1
Dimensions	320 x 300 x 145 mm
Weight	5 kg
Rinsing performance	up to 3000 ml/min
MedGeVO-Group	3
Standards	Made of UL listed components VDE 0750, IEC 601, GS, TÜV, CE

Features	
>	Highest efficiency
>	Aspirates and irrigates at up to 3 l / min
>	Special filters ensure sterility
>	No special adjustment necessary. Aspiration and irrigation are regulated and selected by the instrument controls
>	"Stand-by" function for low noise level
>	High quality components

Accessories	
15-1730-1000	Disposable filter (50 pcs.)
15-1730-1001	Autoclavable tubing set
15-1730-1002	Disposable suction receptacle (25 pcs.)
15-1730-1003	Reusable suction receptacle



SONY DVD-RECORDER



15-1736

DVD-Recorder Sony DVO-1000MD

Including

Operation Manual, Protocol Manual

Technical Data

Main voltage:	100 - 240 VAC
Power Consumption:	35 VA
Frequency:	50 - 60 Hz
Operating temperature:	+5°C to +40°C
Storage Temperature:	-20°C to +60°C
Operating Humidity:	20% to 80%
Dimensions:	212 x 128.5 x 382 mm
Weight:	6 kg
Recording System:	DVD Recording, NTSC/PAL Switchable
Recording Format: Video:	MPEG-2 compression
Audio:	Dolby Digital format
Recordable Media:	DVD+RW (2.4 x and 4 x speed)
Recording Time:	HQ Mode: 60 minutes
SP Mode:	120 minutes
LP Mode:	180 minutes
Medical Standards:	EN60601-1, EN60601-1-2, UL60601-1, CSA C22.2 No.60601.1

Quick Recording with Internal HDD

The DVO-1000MD is equipped with an internal HDD (Hard Disk Drive) so that recording always starts the moment the record button is pressed. The DVO-1000MD begins recording to its HDD while the inserted DVD disc is initialising itself for recording. Once the DVD disc is ready to record, the DVO-1000MD starts writing onto the DVD disc using the data temporarily stored on the HDD. This mechanism, not available on typical DVD recorders, means it is possible to start recording right after the DVD disc is inserted, as well as when resuming the unit from „stop“ mode. The HDD can also be used for data recovery in the unlikely event that a recording fails on the DVD disc.

Accessories

15-1736-102	SVRM-100A, Remote Control
15-1736-103	FS-20, Foot Switch



VIDEO PRINTER



15-1735 Video printer Sony UP 21 MD

The 15-1735 Sony videoprinter is the ideal choice for the endoscopy application, it is very compact and will help to free the space in medical carts.

Including

- Colour printing set
- Paper tray
- Thermal head cleaning kit
- Power cord
- Operating manual

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Technical Data	
Printing method	Dye Sublimation
Thermal head	403 dpi
Graduation	256 graduations, over 16 millions colours
Resolution	325 dpi
Printed area (NTSC)	S Size: Full 95,8 x 72,4 mm L Size: Full 126,9 x 91,5 mm
Print speed	UPC-21S approx. 16 sec.
(High speed mode, NTSC)	UPC-21L approx. 16 sec.
Paper capacity	S Size tray: max. 80 sheets L Size tray: max. 50 sheets
Power consumption	100 - 120 V 1,8 A 220 - 240 V 1,0 A
Dimensions	212 x 125 x 395 mm
Weight	6,5 kg
Safety standards	UL 1950, UP 2601-1 Listed (UC), CSA C22.2 No. 950 (UC), EN60950, EN60601-1 (UC)



SHAVER SYSTEM



16-2050

Shaver system complete with foot switch and hand piece

16-2050-100

Hand piece only

16-2050-200

Foot pedal only

Technical Data

Dimensions	90 x 360 x 268 mm
Weight	6 kg
Power input	230 V AC / 50 Hz
Capacity	50 VA
Primary fuse	2 x 1,6 AT
Type	Type B
Operating mode	Continuous operation
IP Protection class	IXP 0
EN-class	2a
Connections	2 x hand piece
	1 x foot switch
Power cord	230 V, 10 A, 3-pole

Features

- > Speed adjustable from 800 – 8000 RPM
- > Ergonomic and light weight hand piece
- > Silent and smooth motion
- > Hand piece (with cable) autoclavable
- > All functions can be either commanded on the control unit or with the foot switch
- > Shaver offers the possibility to connect 2 tools at the same time (for example hand piece and saw).

FLAT SCREENS



16-2030

Flat screen for medical applications 17"

Including

- Power transformer
- Y/C and RGB connection cable
- Power cord
- Operating manual

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Technical Data

Screen	17"
Definition	920 lines
Max. output resolution	1280 x 1024 Pixels
Max. numbers of colours	16,7 Mio.
Automatic selection	PAL / SECAM / NTSC / M-NTSC
Input	Y/C, RGB
Dimensions	392 x 338 x 123 mm
Weight	5,6 kg
Power supply	85 - 265 Volt, 47 - 63 Hz
Power consumption	35 VA
Standards	Complies with IEC 601 / VDE 0750

Features

- > **For medical cameras**
- > **Many parameters can be adjusted via on-screen-menu**



FLAT SCREENS



16-2031

Flat screen for medical applications 19"

Including

- Power transformer
- Y/C and RGB connection cable
- Power cord
- Operating manual

Technical Data

Screen	19"
Definition	1090 lines
Max. output resolution	1280 x 1024 Pixels
Max. numbers of colours	16,7 Mio
Automatic selection	PAL / SECAM / NTSC / M-NTSC
Input	Y/C, RGB
Dimensions	442 x 338 x 123 mm
Weight	6,6 kg
Power supply	85 - 265 Volt, 47 - 63 Hz
Power consumption	35 VA
Standards	Complies with IEC 601 / VDE 0750

Features

- > **For medical cameras**
- > **Many parameters can be adjusted via on-screen-menu**



EQUIPMENT TROLLEY



15-1740

Equipment trolley

Including

- 4 shelves
- 1 deposit console 60 x 49 cm adjustable, with handle
- 3 deposit consoles 60 x 49 cm, adjustable
- 1 drawer unit with storage tray 60 x 49 cm
- 4 wheels, 2 with brakes

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Technical Data

Dimensions	142,8 x 71,4 x 62,5 cm
Load	50 kg
Colour	light grey
Standards	CE

Accessories

15-1741-100	Holder for gas bottles (5 and 10 L)
15-1741-200	Holding arm for flat screens
15-1741-400	Holder for camera head
15-1741-500	Cable/tube holding arm
15-1741-600	Holder for infusion bottles
15-1741-700	Isolating Transformer

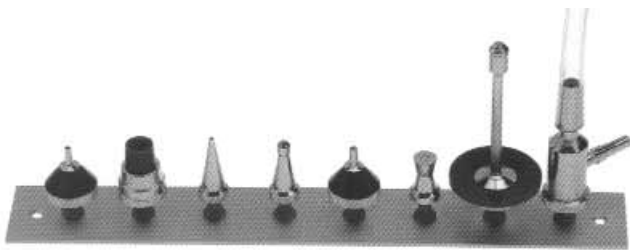


CLEANING ACCESSORIES



15-1681

Cleaning gun



a b c d e f g h

15-1680

Adapters for cleaning gun



13-1678

Cleaning brush for 3 mm instruments, 330 mm

13-1678-45

Cleaning brush for 3 mm instruments, 450 mm

13-1679

Cleaning brush for 5 mm instruments, 330 mm

13-1679-45

Cleaning brush for 5 mm instruments, 450 mm

13-1680

Cleaning brush for 10 mm instruments, 330 mm

13-1680-45

Cleaning brush for 10 mm instruments, 450 mm



CLEANING ACCESSORIES



15-1690 Aluminium container for endoscopes
465 x 280 x 135 mm



15-1695 Endoscope case, 44 x 9 x 5 cm



15-1696 Instrument-sterilizing case, 52 x 25 x 17 cm



CLEANING ACCESSORIES



Endoscope wire basket

15-1697	290 x 80 x 52 mm with silicone position pad
15-1697-100	460 x 80 x 52 mm with silicone position pad
15-1697-200	670 x 80 x 52 mm with silicone position pad



15-1699	Instrument-sterilizing case for 16 instruments, Ø 5 or 10 mm and 64 x 31 x 15 cm
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ACKERMANN INSTRUMENTE GmbH, GERMANY
Eisenbahnstraße 65-67
78604 Rietheim-Weilheim

Phone: ++49 (0) 74 61 / 9 66 17-0
Fax: ++49 (0) 74 61 / 9 66 17-70

info@ackermanninstrumente.de
www.ackermanninstrumente.de