

Fusion™ 1 CMOS FullHD

Endoscopic Camera System

- FullHD **Exmor™** CMOS Sensor camera technology
- Integrated USB recording
- Compatible with 4k monitors
- Touchless instantaneous personalization by NFC cards



- True FullHD – No upscaling
- 360° monofilament camera cable connector
- Various different outputs incl. 2xHD-SDI, which, can be converted to 3D-SDI outputs
- Peripheral triggerings for keyboards and external devices
- Device calibration in less than 1 sec. with Fusion™ NFC Cards, PAL/NTSC encoding in one device
- Realtime optimization
- 16 Languages – more on request
- Preset speciality programs: LAP, ARTHRO, URO, ENT, CYSTO, FLEX
- Unlimited user profiles
- Integrated communication with Ackermann Fusion™ LED lightsource and insufflator
- Recommended to use with screens supplied by Ackermann and Ackermann FullHD scopes
- Demountable camera head for use with HD zoom coupler
- Control via 3 programmable buttons easy to reach and providing a minimum of 8 functions

Recommended Accessories

	Item no.	
Zoom endoscope coupler, C-mount, focal length 16-34 mm, for Ackermann Fusion™	15-1702ZM	

Technical Specifications

Item # 16-2090 / Fusion™ 1CMOS FullHD NTSC/PAL Camera

Camera Control Unit

Touchscreen	7" LCD touchscreen with 16:10 format
RF transmitter	RFID; Frequency 13.56 MHz; OOK; Power 70 mW (+18dBm)
Communication	Integrated communication module; Contactless technology; Fusion Cards
Data management	True FullHD recording with external USB storage device
User profiles	Unlimited
Sensors	Integrated light sensor
Instructions for use	Always available on screen
Video outputs	CVBS: 1.0 V [P-P] / 75 ohms, Negative Sync; Y/C: Y: 1.0 V [P-P] / 75 ohms, C: 0.286 V [P-P] (NTSC), C: 0.3 V [P-P] V [P-P] (PAL) / 75 ohms, Negative Sync; RGB: 3 x 0.7 V [P-P] & 0.3 V [P-P] / 75 ohms; HD-SDI, 3G-SDI: 0.8 V [P-P] / 75 ohms SMPTE292M, SMPTE425M-A; DVI-D
Dimensions	310 x 136 x 385 mm
Weight	4.2 kg
Electric power supply	100 - 240 VAC @ 50 Hz - 60 Hz
Power consumption	50 VA

Camera Head

Sensor	1CMOS technology 1/3" FullHD
Resolution	True FullHD 1920 x 1080 pixels; 4k ready with compatible screens
Definition	1080 lines
Optical interface and focal length	Depends on coupler
Acquisition	16:9 format
Scan mode	Progressive scan technology
Sensitivity	0.1 lux
Sensor dimensions	149(D) x 53 mm (H)
Sensor weight	260 g
Cable length	3 m
Noise	57 dB
Sterilization	Steris and Sterrad 100NX



E240AG

JUSHA Display Professional for Endoscopic Surgery

Jusha display for endoscopic surgery only uses full HD LCD panel with accurate color reproduction, good sense of hierarchy, smooth dynamic display and wide visual range.

It satisfy the rapid changing needs for medical display. In minimally invasive surgery (MIS), it can clearly observe the position of surgery.

The white frame, the front waterproof design, the compliance with electromagnetic compatibility and many video input and output interfaces make the product fully meet the requirements of various endoscopy or operating room and ICU display.



MEDICAL DISPLAY EXPERT

JUSHA DISPLAY TECHNOLOGY CO.,LTD
HOTLINE:400-820-0556 800-820-0556

Product Features

1.Characteristics

With the 12BIT technology, Jusha display for endoscopic surgery only can represent over 68.7 billion colors and accurately reproduce the colors of human tissues in MIS, so that the surgeons can make more accurate judgments.

2.Good sense of hierarchy

The most advanced medical LCD panel used by Jusha display for endoscopic surgery only has good sense of hierarchy, high brightness and high contrast, thus it can represent the hierarchy of any issue in the surgery and provide clear clinical surgery images.

3.Smooth dynamic image

The response time of the gray scale of Jusha display for endoscopic surgery only is less than 20ms, thus it can smoothly present the surgery images from standard definition to high definition and clearly display bleeding and other meticulous operations in the surgery without smearing and shaking.

4.Compliance with the requirements of cleansing and anti-interference in the operating room

The white dust-free design used by Jusha display for endoscopic surgery only meets the cleansing requirements of operating equipment in the operating room. The closed metal design can effectively prevent dust and liquid pollution during the surgery. The body with metal shell and the built-in shield circuit can effectively prevent the interference of electric operating equipment such as high frequency electric knife to the monitor, thus it can ensure the stability of surgical display.

5.Various types of interfaces

Jusha display for endoscopic surgery only can be compatible with various analog signals and digital signals as well as the image pick-up systems of hard lens manufactures and soft lens manufactures in the world. It fully meets the needs of various brands and equipment.

Specification

Model No.	E240AG
Backlight	LED
Size	23.8"
Active Display	527.04 (H) x 296.46(V) mm
Resolution	1920×1080(HD1080p)
Pixel Pitch	0.270 (H) x0.270 (V)mm
Response Time	14ms
Typical Brightness	300cd/m ²
MAX Brightness	400cd/m ²
Contrast Ratio	1000:1
Colour bit depth (LUT)	68.7 Billion Colors(12bit)
View angle	≥178°
LUT	GAMMA2.0,GAMMA2.2,DICOM
Video Input	DVI-I,VGA,CVBS,S-VIDEO,YPbPr,RGBS,SDI
Video Output	DVI-I,CVBS,S-VIDEO,YPbPr,RGBS,SDI
optional	SDI
Power Output	DC 5V1A (USB-A)
Power Requirements	100~240V, 50/60Hz
Max Power Consumption	40W
Typical Power Consumption	32W
Cabinet color	WHITE
Dimensions	565.3x460.3x245mm
Dimensions (Without Stand)	565.3x375.3x65mm
Net Weight	6.5kg
Net Weight (Without Stand)	9kg
Hole Spacing	VESA : 100*100mm
Osd Languages	Chinese、 English

Premium Equipment

Trolley

Featuring:

- Monitor holder on crossbeam (14 - 18 kg)
- Removable rear panel
- Side panels for integrated cable management
- 4 shelves
- Drawer
- 4 twin swivel casters with break



Eco Equipment

Trolley

Featuring:

- Side panels for integrated cable management
- 5 shelves
- Drawer
- 4 twin swivel casters with break



Optional Accessories

	For use with		Item no.
	15-1740	15-1741	
Holder for 3 L / 5 L / 10 L gas bottles (max. Ø 145 mm / 20 kg)	•	•	15-1741-100
Adjustable monitor holding arm (VESA 75 / 100, max. 10 kg)	•	•	15-1741-200
8-plug socket strip with mount and power cord (5 m)	•	•	15-1741-300
Camera head holder, C-mount	•	•	15-1741-400
Adjustable arm with tubing clamps (900 mm swing range, max. 1 kg)	•	•	15-1741-500
Adjustable infusion stand (max. 4 x 2 kg, 870 mm)	•	•	15-1741-600
Storage basket, (max. 3 kg, 305 x 205 x 150 mm)	•	•	15-1741-700
Isolating transformer (1000VA)	•		15-1740-992



HF Equipment Trolley

	Item no.
Equipment trolley for HF-unit	16-2000-1500



FullHD Cystoscopes



	Diameter		Viewing angle				Item no.
	Ø 2.9 mm	Ø 4 mm	0°	12°	30°	70°	
FullHD Cystoscope, 300 mm	•		•				32-4002HD
FullHD Cystoscope, 300 mm		•	•				32-4000HD
FullHD Cystoscope, 300 mm	•			•			32-4015HD
FullHD Cystoscope, 300 mm		•		•			32-4010HD
FullHD Cystoscope, 300 mm	•				•		32-4022HD
FullHD Cystoscope, 300 mm		•			•		32-4020HD
FullHD Cystoscope, 300 mm		•				•	32-4030HD

Cysto-Urethroscope Sheaths incl. Obturator

2 Lateral Stopcocks / Adults & Adolescents



QL

	Diameter	For use with scope		Color coding	Item no.
		Ø 2.9 mm	Ø 4 mm		
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 15 Fr., 32-4074S 5 Fr. working channel and Standard obturator for 32-4074S 32-40740	Ø 15 Fr.	•		●	32-4074
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 15 Fr. 32-4073S and Standard obturator for 32-4073S 32-40730	Ø 16 Fr.	•		●	32-4073
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 17 Fr. 32-4070S and Standard obturator for 32-4070S 32-40700	Ø 17 Fr.		•	●	32-4070
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 19 Fr. 32-4075S and Standard obturator for 32-4075S 32-40750	Ø 19 Fr.		•	●	32-4075
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 21 Fr. 32-4080S and Standard obturator for 32-4080S 32-40800	Ø 21 Fr.		•	●	32-4080
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 23 Fr. 32-4085S and Standard obturator for 32-4085S 32-40850	Ø 23 Fr.		•	●	32-4085
Cysto-Urethroscope sheath incl. obturator, 2 lateral stopcocks includes Cysto-Urethroscope sheath, 2 lateral stopcocks, Ø 25 Fr. 32-4090S and Standard obturator for 32-4090S 32-40900	25 Fr.		•	●	32-4090

Telescope Bridge

With 2 Instrument Channels



	Item no.
Telescope bridge with 2 instrument channels, suitable for 17 - 25 Fr. cysto-sheath	32-4105

Albarran Deflector

With 1 Instrument Channel



	Item no.
Albarran deflector with 1 instrument channel, lockable, suitable for cysto-sheaths from 17 Fr.	32-4110

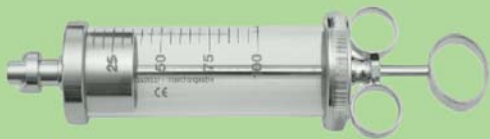
Albarran Deflector

With 2 Instrument Channels



	Item no.
Albarran deflector with 2 instrument channels, lockable, suitable for cysto-sheaths from 17 Fr.	32-4115

Bladder Syringe



	Item no.
Bladder syringe, 150 ml	32-4395-150

Strauss Penis Clamp



	Item no.
Strauss penis clamp	32-4420

Ellik Evacuator



	Item no.
Ellik evacuator with rubber ball and locking	32-4106
includes Glass retainer only for Ellik evacuator	32-4106E
and Rubber ball for Ellik evacuator	32-4106-100
and Tubing with locking adapter for Ellik evacuator	32-4106-200

Cystoscopy

Accessories



Ordering n°	Description
4133500	Evacuator (Glass bulb + Rubber bulb) w/o sheath connector
4133504	Glass Bulb
4133505	Rubber Bulb



Ordering n°	Description
4133502	Sheath connector, simple with tubing
4133503	Sheath connector with locking device and tubing
4133503A	Sheath connector with tubing, QUICK-LOCK device
4133058	Sheath connector, QUICK-LOCK device to BAYONET

Handle for Dormia Stone Basket



Handle for dormia stone basket, Ø 5 Fr.

Item no.

32-4211

Cleaning Brush



Cleaning brush, 600 mm

Item no.

70-8040

URS Adapter

For Use with URS Scopes



URS adapter

Item no.

70-8000-100

Silicone Cap Luer Lock

For Use with URS Scopes



Silicone cap luer lock

Item no.

70-8000A

Cystoscopy

Cysto-Urethroscope Forceps, w/400mm



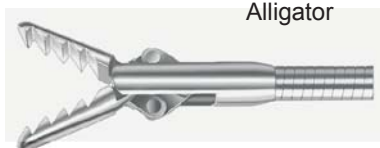
Biopsy Oval Cup Sharp



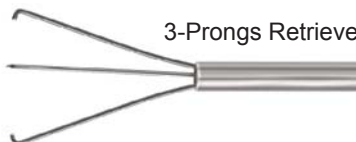
Grasping forceps, interlocking teeth, concave, short, for stone street



Alligator



3-Prongs Retriever



Flexible	Semi Rigid	Ø Ch	Ø mm
42004008	42004008S	2,5	0,8
42004010	42004010S	3,0	1,0
42004012	42004012S	3,5	1,2
42004014	42004014S	4,0	1,4
42004016	42004016S	5,0	1,6
42004021	42004021S	6,0	2,1
42004023	42004023S	7,0	2,3
42004030	42004030S	9,0	3,0

Flexible	Semi Rigid	Ø Ch	Ø mm
42074012	42074012S	3,5	1,2
42074016	42074016S	5,0	1,6
42074023	42074023S	7,0	2,3

Flexible	Semi Rigid	Ø Ch	Ø mm
42044008	42044008S	2,5	0,8
42044010	42044010S	3,0	1,0
42044012	42044012S	3,5	1,2
42044014	42044014S	4,0	1,4
42044016	42044016S	5,0	1,6
42044023	42044023S	7,0	2,3
42044030	42044030S	9,0	3,0

Flexible	Semi Rigid	Ø Ch	Ø mm
42094010	42094010S	3,0	1,0
42094016	42094016S	5,0	1,6
42094023	42094023S	7,0	2,3

Cystoscopy

Cysto-Urethroscope Forceps, wl400mm



Fix handle system
With spring

Flexible	Semi Rigid	Ø Ch	Ø mm
42084012	42084012S	3,5	1,2
42084016	42084016S	5,0	1,6

Flexible	Semi Rigid	Ø Ch	Ø mm
42254012	42254012S	3,5	1,2
42254016	42254016S	5,0	1,6
42254023	42254023S	7,0	2,3

Flexible	Semi Rigid	Ø Ch	Ø mm
42014010	42014010S	3,0	1,0
42014012	42014012S	4,0	1,3
42014016	42014016S	5,0	1,6
42014021	42014021S	6,0	2,1
42014023	42014023S	7,0	2,3
42014030	42014030S	9,0	3,0

Flexible	Semi Rigid	Ø Ch	Ø mm
42024023	42024023S	7,0	2,3
42024030	42024030S	9,0	3,0



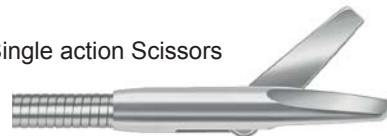
Grasping forceps, long, for stone street



Stone fragments
Grasping Forceps



Single action Scissors



Single action
Hook Scissors



Compact LED

Lightsource

- **LED lightsource 180 W Xenon equivalent**
- **Automatic light cable detection**
- **OLED display**

- Standby function
- Light intensity memory
- Anti-blooming system
- Automatic overheating protection
- Intuitive adjustment of light intensity
- LED lifetime of up to 50.000 hours
- Power level memory
- Color temperature 6.500°K



Technical Specifications

Item # **16-2028** / Compact LED Lightsource, 180 W Xenon equivalent

Lamp type	LED
Performance	LED equivalent to 180 W Xenon
Color temperature	>6500° K
LED life duration	50.000 hours
Main voltage	100 - 230 VAC
Power consumption	140 VA
Frequency	50 - 60 Hz
Dimensions	300 x 300 x 66 mm
Weight	3 kg
Fuses	T 800 mA - 250V

High-Performance Fiber Light Cables



	Length			Item no.
	1.8 m	2.4 m	3 m	
High-performance fiber light cable, Ø 5 mm	•			11-1168
High-performance fiber light cable, Ø 5 mm		•		11-1167
High-performance fiber light cable, Ø 5 mm			•	11-1161

Standard Fiber Light Cables



	Length			Item no.
	1.8 m	2.3 m	3 m	
Standard fiber light cable, Ø 3.5 mm	•			11-1150
Standard fiber light cable, Ø 3.5 mm		•		11-1151
Standard fiber light cable, Ø 3.5 mm			•	11-1152

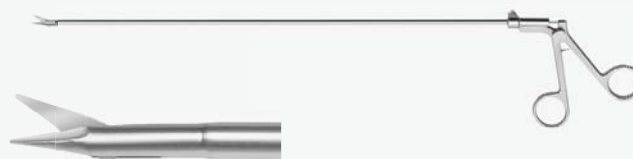
Light Cable Testers



	Type			Item no.
	Ackermann / Storz ¹	Wolf ¹	Olympus ¹	
Light cable tester	•			11-16000CB
Light cable tester		•		11-16000CBWOL
Light cable tester			•	11-16000CBOLYWA

Scissors

Short & Standard Nephroscopy



Scissors, Ø 3 mm, rigid, ring handle, flushable, 400 mm

Item no.

70-8235

Fenestrated Stone Grasper

Short & Standard Nephroscopy



Fenestrated stone grasping forceps, Ø 3 mm, spring handle, 400 mm

Item no.

70-8210

3-Prong Grasper

Short & Standard Nephroscopy



3-Prong grasping forceps, Ø 3 mm, spring handle, 400 mm

Item no.

70-8215