



UG 230

Equipment Cart LC, rides on 4 antistatic dual wheels equipped with locking brakes, energy beam with integrated electrical subdistributors with 6 sockets, grounding plugs,

Dimensions:

Equipment cart: 830 x 1474 x 730 mm (w x h x d),

Shelf: 630 x 25 x 510 mm (w x h x d),

Caster diameter: 125 mm

including:

Base Module, equipment cart LC

Cover, equipment cart LC

Beam Package, equipment cart LC

Shelf, wide

Drawer Unit with Lock, wide

Camera Holder

2x **Mains Cord**, length 100 cm



UG 603

Shelf, narrow, load capacity max. 60 kg, dimensions: 450 x 25 x 510 mm (w x h x d), for use with Equipment Carts UG xxx

UG 604

Shelf, wide, load capacity max. 60 kg, dimensions: 630 x 25 x 510 mm (w x h x d), for use with Equipment Carts UGxxx

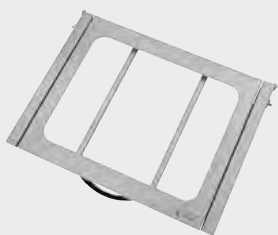


UG 601

Drawer Unit with Lock, small, max. shelf load 60 kg, max. drawer load 5 kg, with cable slot, dimensions: 450 x 126 x 510 mm (w x h x d), for use with Equipment Carts UG xxx

UG 602

Drawer Unit with Lock, wide, max. shelf load 60 kg, max. drawer load 5 kg, with cable slot, dimensions: 630 x 126 x 510 mm (w x h x d), for use with Equipment Carts UG xxx



UG 610

Sliding Tray Holder, narrow, load capacity max. 10 kg, dimensions: 450 x 510 mm (w x d), for use with Equipment Carts UG xxx

UG 611

Sliding Tray Holder, wide, load capacity max. 10 kg, dimensions: 630 x 510 mm (w x d), for use with Equipment Carts UG xxx



UG 608

Equipment Rail, long, for mounting to side of equipment cart, dimensions: 300 x 25 x 10 mm (w x h x d), for Equipment Carts UG xxx

UG 607

Equipment Rail, short, for mounting to side of equipment cart, dimensions: 170 x 25 x 10 mm (w x h x d), for Equipment Carts UG xxx



UG 619

Cable Manager, 2-piece, for mounting to vertical beam, package of 2, for use with Equipment Carts UG xxx



CO₂ Adaptor Set for Bottle Holder

UG812

Adaptor Set for Bottle Holder, COR mobile stand, two elements, dimensions in mm (w x h x d): 49 x 162 x 65 and 49 x 252 x 65, for use with Beam Modules UG801 and UG802 and CO₂ Bottle Holder UG609

UG609

Bottle Holder, for CO₂ bottles, max. diameter 210 mm, dimensions in mm (w x h x d): 230 x 280 x 210, for use with Equipment Carts UGxxx



UG814

Suction Canister Holder, COR mobile stand, dimensions in mm (w x h x d): 210 x 276 x 256, for use with Guardian Suction Canister 030306-04



UG901

Footswitch Holder, for use with One-Pedal Footswitch UF901



UG902

Footswitch Holder, for use with Two-Pedal Footswitch UF902 and one- and two-pedal universal footswitches



29005EFH

Footswitch Holder, for one-pedal footswitch



29005DFH

Footswitch Holder, for two- and three-pedal footswitches



29005KHN

Camera Holder, for mounting camera heads, with removable inserts, compatible with all KARL STORZ endoscopic camera heads, for mounting to equipment rails

	UG 310 Isolation Transformer, 200 – 240 V, 2000 VA, with 3 special mains socket, automatic cutout, 3 grounding plugs, Dimensions: 330 x 90 x 495 mm (w x h x d), for use with Equipment Carts UG xxx UG 300 Same, 100 – 120 V
	UG 410 Earth Leakage Monitor, 200 – 240 V, for mounting to equipment carts, control panel dimensions: 44 x 80 x 29 mm (w x h x d), for use with Isolation Transformer UG 310 UG 400 Earth Leakage Monitor, 100 – 120 V, for mounting to equipment carts, control panel dimensions: 44 x 80 x 29 mm (w x h x d), for use with Isolation Transformer UG 300
	UG 700 Mains Cord, with angled plug, length 100 cm
	20 0102 70 Potential Equipotential Cable, length 500 cm 20 0103 70 Potential Equipotential Cable, length 200 cm 20 0105 70 Potential Equipotential Cable, length 150 cm 20 0106 70 Potential Equipotential Cable, length 100 cm
	29005 PA-DR Potential Equipotential Cable Set, for equipment carts, for 5 units, including Potential Equipotential Cable 5x 20 0106 70, 1x 20 0105 70, 1x 20 0102 70, for use with COR equipment carts and Equipment Cart 29005 DRB/DRS
	UG 605 Keyboard Tray, narrow, for mounting under narrow Shelf UG 603, load capacity max. 10 kg, Dimensions: 430 x 480 mm (w x d), for use with Equipment Carts UG xxx UG 606 Keyboard Tray, wide, for mounting under wide Shelf UG 604, load capacity max. 10 kg, Dimensions: 630 x 480 mm (w x d), for use with Equipment Carts UG xxx

32" 4K Medical Display

FM-E3203D FM-E3203DG



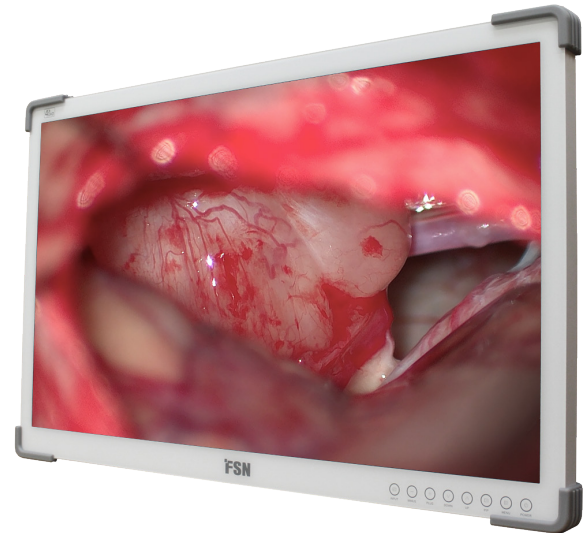
FSN
Medical Technologies

- *Vivid colors plus high brightness level.*
- *Protective corner guards add safety to active ORs.*
- *Fast detection of MIS camera system video.*

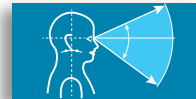


See Every Detail

The 4K UHD technology found in this monitor produces ultra-sharp picture clarity and high levels of detail. This greatly enhances images from endoscopic camera systems. The input source options on this monitor include DVI, HDMI, and DisplayPort. The FM-E3203DG model adds 3G and 12G SDI to the impressive selection of signal input choices.

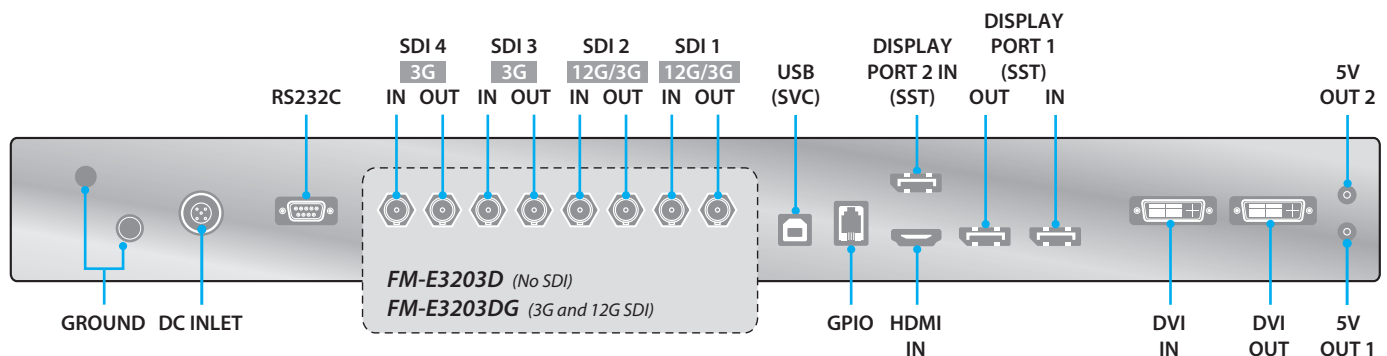


Edge-to-edge protective front glass gives this monitor a slim, sleek appearance, and allows for easy cleaning of the front surface. Protective guards on the bezel corners help reduce bumping injuries, especially in today's active operating room environments. A back cable cover is provided with each monitor to manage cords and wires.



Ergonomic Design

If an installation requires additional components to be used with the monitor, such as fiber optic or wireless receivers, there are built-in connections for DC 5 volt power. FSN monitors are designed with maximum viewing angles, allowing several clinicians to view the display in the same room without loss of image quality or distortion.



www.fsnmed.com

Foreseeson Custom Displays, Inc.
2210 E. Winston Road
Anaheim, CA 92806 USA
Tel: 714-300-0540
Fax: 714-300-0546

Latin America
Aventura, FL 33180 USA
Tel: 714-507-3855

Foreseeson Korea
B-408, U-Space2
670 Daewangpangyo-ro,
Bundang-gu, Seongnam-si
Gyeonggi-do, Republic of Korea
Tel: +82-31-8017-0780

Foreseeson GmbH
Industriestrasse 38a
63150 Heusenstamm, Germany
Tel: +49 6104 64398 0
Fax: +49 6104 64398 11

Foreseeson UK Ltd.
1 Wolsey Road
East Molesay
Surrey
KT8 9EL
United Kingdom
Tel: +44 (0) 208 546 1047

Foreseeson (Shanghai)
Medical Equipment Co., Ltd.
Room 8E, No. 89 Building
1122 North Qinzhou Road
Xuhui, Shanghai 200233, China
Tel: 86-21-6113-4188

32" 4K Medical Display

FM-E3203D FM-E3203DG

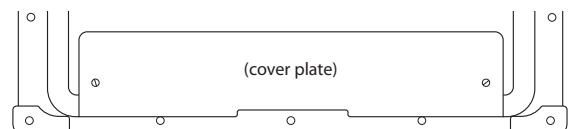
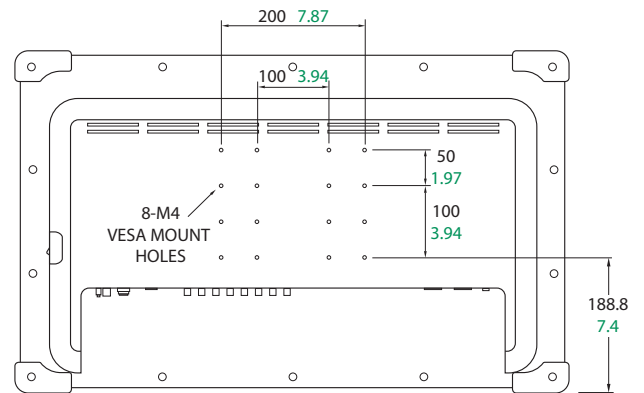
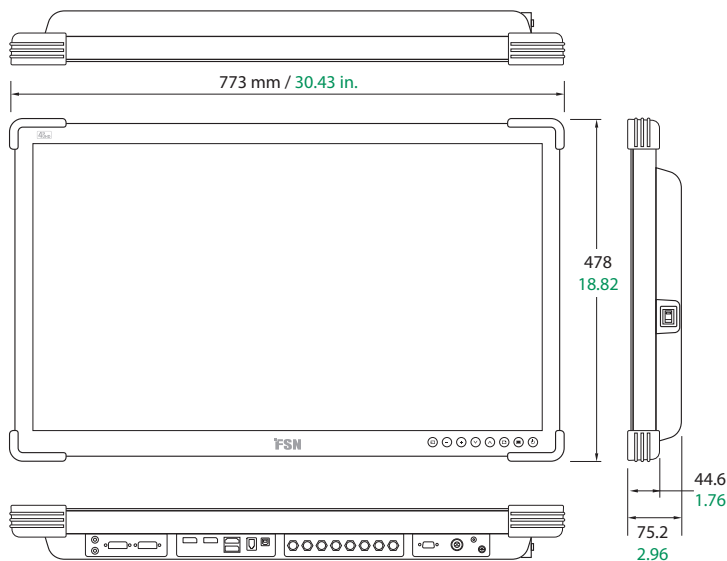


Specifications

General Features

Item	Description
Panel	32 inch TFT LCD (LED)
Resolution	3840 x 2160 pixels
Aspect Ratio	16 : 9
Active Area	708.48 (H)mm x 398.82 (V)mm
Pixel Pitch (mm)	0.1845 x 0.1845
Response Time (typical)	8 ms (rise time)
Number of Colors	1.07 Billion
Brightness (typical)	700 cd/m ²
Calculated Gamut	BT.709 and BT.2020 compatible
Contrast Ratio (typical)	1350 : 1
Surface Treatment	Anti-glare
Viewing Angle (CR>10)	R/L 178°, U/D 178°
Input Signal	1 x HDMI 2.0 2 x DP 1.2 (SST) 1 x DVI (single link) 4 x SDI (3G), 2 x SDI (12G) available on FM-E3203DG

Item	Description
Output Signal	1 x DP 1.2 (SST) 1 x DVI (single link) 4 x SDI (3G), 2 x SDI (12G) available on FM-E3203DG
Power Supply	AC/DC Adaptor (AC 100~240V, DC 24V/6.6A)
Power Consumption	FM-E3203D 105W max FM-E3203DG 125W max
Accessories Included	User manual, AC-DC adaptor, AC power cord, DP cable, HDMI cable, DVI-D cable, BNC cable (SDI models), Screw BH M4 x 14
Latency	9 ms
Unit Dimension	773(W) x 478(H) x 75.2(D) mm 30.43(W) x 18.82(H) x 2.96(D) inch
Package Dimension	914.4(W) x 749.3(H) x 234.95(D) mm 36(W) x 29.5(H) x 9.25(D) inch
IP Rating	IP33 - overall, IP44 - front side only
IK Rating	IK07 with 5H AR glass
Weight	FM-E3203D 11.56 kg, 25.49 lbs. (monitor with cover) 16.83 kg, 37.10 lbs. (shipping package) FM-E3203DG 11.80 kg, 26.01 lbs. (monitor with cover) 17.5 kg, 38.58 lbs. (shipping package)
Certifications	ANSI/AAMI ES60601-1 (UL60601-1), CAN/CSA C22.2 No. 60601-1, FCC Class B, EN60601-1, EN60601-1-2, CE, MDR(EU) 2017/745 Class I Medical Device



FSN Medical Technologies products meet EU RoHS Directive 2011/65/EU+2015/863/EU and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) obligations. FSN manages the information flow as required by regulations.

Available Accessories

	UG410	Earth Leakage Monitor, 200-240 V	for mounting to equipment carts, control panel dimensions: 44 x 80 x 29 mm (w x h x d), for use with Isolation Transformer UG310
	UG400	Earth Leakage Monitor, 100-120 V	for mounting to equipment carts, control panel dimensions: 44 x 80 x 29 mm (w x h x d), for use with Isolation Transformer UG300
	UG501	Monitor Holder Adaptor	for central mounting of monitor holding arms on the rear attachment points of the COR equipment carts UGxxx for use with UG500, UG510 and UG520
	UG540	Monitor Swivel Arm	height and side adjustable, can be positioned on the left or on the right side, swivel range 180°, reach 780 mm, from center 1170 mm, loading capacity max. 15 kg, with monitor mount VESA 75/100
	UG500	Monitor Holder	height adjustable, swiveling and tilting, swivel range approx. 360°, loading capacity max. 18 kg, with monitor mount VESA 75/100
	UG520	Monitor Holding Arm, long	height and side adjustable, tilting, swivel range approx. 320°, reach 760 mm, loading capacity max. 15 kg, with monitor mount VESA 75/100
	UG510	Monitor Holding Arm	height and side adjustable, tilting, can be mounted either on the left or on the right side, swivel range up to approx. 320°, reach 530 mm, loading capacity max. 15 kg, with monitor mount VESA 75/100

Possible Configuration Examples

Note: The lists do not include units

Telepresence:

Rubina®

The new housing design includes a special shelf for equipment.



UG803

Subrack, COR mobile stand, low

UG811

Cover, monitor holder for COR mobile stand

UG820

Shelf, narrow, COR mobile stand

UG823

Special Equipment Shelf, COR mobile stand

UG854

Stainless Steel Tube, COR mobile stand, length 400 mm

UG857

Monitor Module, COR mobile stand

Monitors

The new COR mobile stand is offered with a monitor holder that is suitable for monitors larger than 55".



UG804

Subrack, COR mobile stand, high

UG811

Cover, monitor holder for COR mobile stand

UG817

Counterweight, for monitors larger than 55", COR mobile stand

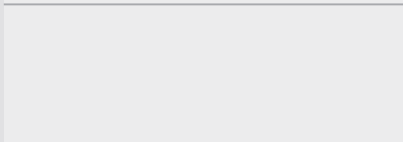
UG820

Shelf, narrow, COR mobile stand

UG858

55"/58" Monitor Module, COR mobile stand



	TZ 100	ZeroWire G2 Transmission Set, for wireless 2D and 3D video transmission, supports resolutions up to 1080p, 50/60 Hz, with DVI and 3G-SDI inputs including: Transmitter Receiver 2x VESA Holders 24"/26" 2x DVI-D Cables SDI Cable User Manual Installation Manual Note: Two TZ 001, TZ 002, TZ 003 or 9826 NB-ZW are required per ZeroWire G2 Video Transmission Set depending on the monitor.
	TZ 101	ZeroWire G2 Receiver, for wireless 2D and 3D video transmission, supports resolutions up to 1080p, 50/60 Hz, with DVI input
	TZ 102	ZeroWire G2 Transmitter, for wireless 2D and 3D video transmission, supports resolutions up to 1080p, 50/60 Hz, with DVI and 3G-SDI inputs
	9826 NB-ZW	ZeroWire Y-Cable, Y-cable for looping into the monitor power supply to power the ZeroWire transmitter or receiver. The adaptor cable is equipped with a 4-pin plug, a bifurcation to a 4-pin socket and a DC plug. Note: For use with ZeroWire G2 Transmission Set TZ 100 in conjunction with FULL HD Monitor 9826 NB, 26" 3D Monitor 9826 NB-3D, 26" 3D Monitor TM 263, 32" 3D Monitor TM 323 and 32" 3D Monitor TM 330
	TZ 001	ZeroWire G2 Power Supply, external 3-pin power supply, 24 V, 18 W, for direct connection to the video transmission system, for use with all monitors

Components/Spare Parts see chapter 13

IMAGE1 S™ Camera System



TC201EN*

IMAGE1 S CONNECT® II, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ SCB or KS HIVE and digital image processing module, power supply 100 – 240 VAC, 50/60 Hz, including:

Mains Cord, length 300 cm

DVI-D Connecting Cable, length 300 cm

DisplayPort Cable, length 300 cm

SDI Cable, length 300 cm

SCB Connecting Cable, length 100 cm

USB Flash Drive, 32 GB

USB Silicone Keyboard, with touchpad, US

*** Available in the following languages:** DE, ES, FR, IT, PT, RU

Please specify the desired language when placing your order.

Technical Specifications

Video outputs	2x Display Port 1.2, 1x 12G/3G-SDI, 1x DVI-D
Format of signal outputs	max. 3840 x 2160p, 50 / 60 Hz
Link video inputs	3x
USB interface	4 x USB, (2x front, 2x rear)
Unit communication	1 x 6-pin Mini-DIN

Power supply	200–240 VAC
Power frequency	50 / 60 Hz
Protection class / degree	1 / CF-Defib
Dimensions (w x h x d)	305 x 54 x 320 mm
Weight	3.1 kg

For use with IMAGE1 S CONNECT® II Module TC201EN



TC304

IMAGE1 S 4U-LINK, link module, for use with IMAGE1 S™ 4U camera heads, power supply 100 – 240 VAC, 50/60 Hz, including:

Mains Cord, length 300 cm

Link Cable, length 20 cm, for use with IMAGE1 S CONNECT® TC200EN or IMAGE1 S CONNECT® II TC201EN

Technical Specifications

Interfaces	1x link output
Power consumption	86 VA
Power frequency	50 / 60 Hz
Power supply	200–240 VAC
Dimensions (B x H x T)	305 x 54 x 320 mm

Weight	1,86 kg
Cleaning	wipe disinfection
Degree of ingress protection	IPX0
Protection class / degree	1 / CF-Defib

IMAGE1 S™

Camera Head 4U One-Chip 4K UHD and Camera Head 4U RUBINA Two-Chip 4K UHD

**IMAGE1 S™ 4U One-Chip 4K UHD camera head, for use with TC304, IMAGE1 S 4U-LINK, module for 4K endoscopy**

IMAGE1 S™ 4U One-Chip 4K UHD Camera Head, S-technologies available, progressive scan, soakable, EtO sterilization, H₂O₂ (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK

Technical Specifications

Frame rate	50 / 60 Hz
Image sensor	One-chip
Resolution	3840 x 2160 pixels
Scanning mode	progressive scan
Lens	fixed focus
Focal length	f = 18 mm
Dimensions (w x h x l)	46 x 37 x 133 mm
Weight	210 g

Cable length	300 cm
Cable routing	angled
Camera head buttons	freely programmable
Grip mechanism	standard eyepiece adaptor
Reprocessing	soakable, EtO sterilization, H ₂ O ₂ (hydrogen peroxide)
S-Technologies	CLARA, CHROMA, SPECTRA*
Degree of protection	in conjunction with camera control unit IMAGE1S™: CF-Defib

* SPECTRA A / SPECTRA B: **Not for sale in the U.S.A.**

IMAGE1 S™ 4U RUBINA, OPAL1® NIR/ICG, Two-Chip 4K UHD Camera Head
for use with TC201EN, IMAGE1 S CONNECT® II and TC304, IMAGE1 S 4U-LINK, module for 4K endoscopy



IMAGE1 S™ 4U RUBINA, OPAL1® NIR/ICG, Two-Chip 4K UHD Camera Head, S-technologies available, for NIR/ICG fluorescence imaging in combination with Power LED RUBINA, OPAL1® NIR/ICG, progressive scan, soakable, EtO sterilization, H₂O₂ (hydrogen peroxide), focal length f = 19 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S CONNECT® II and IMAGE1 S 4U-LINK

Technical Specifications

Frame rate	50 / 60 Hz
Image sensor	Two-chip
Resolution	3840 x 2160 pixels
Scanning mode	progressive scan
Lens	fixed focus
Focal length	f = 19 mm
Dimensions (w x h x l)	150 x 55 x 41 mm
Weight	260 g

Cable length	300 cm
Cable routing	angled
Camera head buttons	freely programmable
Grip mechanism	standard eyepiece adaptor
Reprocessing	soakable, EtO sterilization, H ₂ O ₂ (hydrogen peroxide)
S-Technologies	CLARA, CHROMA, SPECTRA*
Degree of protection	in conjunction with camera control unit IMAGE1S™: CF-Defib

* SPECTRA A / SPECTRA B: **Not for sale in the U.S.A.**

LED Cold Light Fountains

POWER LED 175 SCB, LED NOVA 150



	20 1614 01-1 Cold Light Fountain POWER LED 175 SCB	20 1612 01 Cold Light Fountain LED NOVA 150
	with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet	high-performance LED module, with one KARL STORZ light outlet
including:	Mains Cord SCB Connecting Cable	Mains Cord

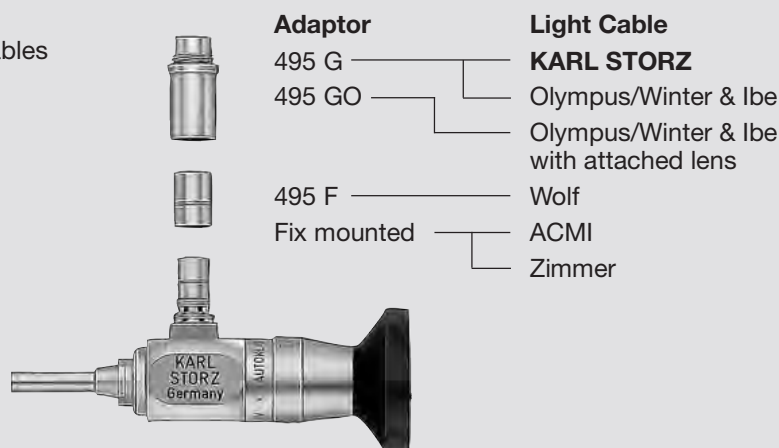
Specifications:

Illumination technology	LED	
Color temperature	approx. 6400 K	
Average lamp service life	30,000 h	
Light intensity adjustment	automatic via SCB manual via SCB manual via membrane keyboard	manual
Unit communication	KARL STORZ Communication Bus (2x SCB)	—
Power consumption	110 VA	60 VA
Power supply	110 – 240 VAC	100 – 240 VAC
Power frequency	50/60 Hz	
Dimensions w x h x d	305 x 110 x 233 mm	305 x 84 x 238 mm
Weight	4 kg	2.3 kg
Cleaning	wipe disinfection	
Protection class	1	
Degree of safety	CF	

Adaptors

for Light Sources and Light Cables

HOPKINS® Telescopes with universal connector for light cables



Manufacturer	I = Instrument CF= Cold Light Fountain LC= Light Cable	KARL STORZ				Special Applications
		Light Cable	Cold Light Fountain	Former Instrument	Current Instrument	
ACMI	I	495 W	—	—	—	ACMI connector to ACMI connector 495 Y
	CF	495 PA	—	—	—	
	LC	—	495 C	—	—	
Downs	CF	495 PA	—	—	—	Olympus Techno Fountain for KARL STORZ Cable 81495 OT, Olympus Light Cable for KARL STORZ Techno Fountain 81450/81495 OL
Dyonics	CF	495 Q	—	—	—	
Effner	CF	495 Q	—	—	—	
Fuji	CF	495 FU	—	—	—	
KLI	LC	—	495 C	—	—	
	CF	495 PA	—	—	—	
Machida	CF	495 SM	—	—	—	
Olympus	CF	495 SON	—	—	—	
	LC	—	495 D	—	—	
Pentax	CF	495 T	—	—	—	
	LC	—	495 D	—	—	
HSW	CF	495 Q	—	—	—	495 S: The use of KARL STORZ fiberscopes with integrated fiber optic light cable and KARL STORZ light cables with non-graduated distal connection (diameter 7 mm) requires an additional adaptor 495 PWS to adaptor 495 S
	LC	—	495 E	495 N	495 N	
Stryker	I	495 ST	—	—	—	
	CF	495 PA	—	—	—	
Richard Wolf	I	495 X	—	—	—	
	CF	495 Q	—	—	—	
	LC	—	495 E	495 M	—	
Olympus/ Winter & Ibe	CF	495 S	—	—	—	
	LC with attached lens	—	—	495 GO	495 GO	

Fiber Optic Light Cables

for Cold Light Fountains



Fiber Optic Light Cable with Straight Connector

- 495 NE **Fiber Optic Light Cable**, diameter 4.8 mm, length 300 cm
- 495 NCS **Fiber Optic Light Cable**, extremely heat-resistant, diameter 4.8 mm, length 250 cm
- NEW** 495 NCSC **Fiber Optic Light Cable**, extremely heat-resistant, with safety locking device, diameter 4.8 mm, length 250 cm
- 495 NB **Fiber Optic Light Cable**, diameter 4.8 mm, length 180 cm
- 495 ND **Fiber Optic Light Cable**, diameter 3.5 mm, length 300 cm
- 495 NA **Fiber Optic Light Cable**, diameter 3.5 mm, length 230 cm
- NEW** 495 NAC **Fiber Optic Light Cable**, with safety locking device, diameter 3.5 mm, length 230 cm
- 495 NL **Fiber Optic Light Cable**, diameter 3.5 mm, length 180 cm
- 495 NTA **Fiber Optic Light Cable**, diameter 2.5 mm, length 230 cm
- 495 NT **Fiber Optic Light Cable**, diameter 2.5 mm, length 180 cm
- NEW** 495 TIP **Fiber Optic Light Cable**, highly heat resistant, diameter 4.8 mm, length 300 cm, optimized for 3D TIPCAM®1 and TIPCAM®



Fiber Optic Light Cable with 90° Deflection to the Light Source

- 495 NWL **Fiber Optic Light Cable**, with 90° deflection to the cold light fountain on the fountain side, diameter 3.5 mm, length 300 cm
- 495 NWM **Fiber Optic Light Cable**, with 90° deflection to the cold light fountain on the fountain side, diameter 3.5 mm, length 230 cm
- 495 NW **Fiber Optic Light Cable**, with 90° deflection to the cold light fountain on the fountain side, diameter 3.5 mm, length 180 cm
- 495 NTX **Fiber Optic Light Cable**, with 90° deflection to the cold light fountain on the fountain side, diameter 2.5 mm, length 230 cm
- 495 NTW **Fiber Optic Light Cable**, with 90° deflection to the cold light fountain on the fountain side, diameter 2.5 mm, length 180 cm



495 NVC



495 NV/NVL/NVB

Fiber Optic Light Cable with 90° Deflection to the Instrument

- NEW** 495 NVC **Fiber Optic Light Cable**, with 90° deflection to the instrument, very narrow radius of curvature, diameter 4.8 mm, length 300 cm
- 495 NVB **Fiber Optic Light Cable**, with 90° deflection to the instrument, diameter 4.8 mm, length 300 cm
- 495 NVL **Fiber Optic Light Cable**, with 90° deflection to the instrument, diameter 3.5 mm, length 300 cm
- 495 NV **Fiber Optic Light Cable**, with 90° deflection to the instrument, diameter 3.5 mm, length 230 cm



Light Adaptor, angled 90°

- 495 EW **Light Adaptor**, angled 90°, diameter 4.8 mm, free rotatable, to connect with standard telescopes

Adaptor for connecting KARL STORZ fiber optic light cables with endoscopes and light sources from other manufacturers, see page TP 132

ENDOFLATOR® 50 SCB

with speed-flow insufflation (50 l/min),
Recommended Standard Set Configuration



INSUFFLATORS AND
SMOKE GAS SUCTION CONTROL



UI 500S1

ENDOFLATOR® 50 SCB, with integrated SCB module,
power supply 100 – 240 VAC, 50/60 Hz
including:
SCB Connecting Cable, length 100 cm
Universal Wrench
Heated Insufflation Tubing Set, with gas filter,
sterile, for single use, package of 10

STERILE

Specifications:

Operating mode	- PEDIATRIC mode - HIGH FLOW mode
Gas flow	- PEDIATRIC mode: 0.1 – 15 l/min - HIGH FLOW mode: 1 – 50 l/min
Pressure	- PEDIATRIC mode: 1 – 15 mmHg - HIGH FLOW mode: 1 – 30 mmHg
Gas	CO ₂
Measuring/control system	Electronic
Parameter display	- Set pressure - Actual pressure (intraabdominal) - Gas flow - Gas consumption: 0-999 l - Status display gas consumption

SECUVENT® safety system	•
Heating element	•
Power supply	100 – 240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 164 x 315 mm
Weight	7.8 kg
Certified to	IEC 60601-1



Optional Accessories for ENDOFLATOR® 50 SCB see pages U 12-13
Components/Spare Parts see chapter 18

Optional Accessories

for Insufflators

for use with

ENDOFLATOR® 40 SCB
UI 400S1

ENDOFLATOR® 50 SCB
UI 500S1

	031200-10	Insufflation Tubing Set with Gas Filter , length 300 cm, hydrophobic on both sides, sterile, for single use, package of 10, for use with insufflation units with a maximum gas flow of 50 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®, ENDOFLATOR® 40 and ENDOFLATOR® 50)	STERILE 	•	•
	031210-10*	Same , heatable	STERILE 	–	•
	031122-25	Gas Filter , with ISO connectors, hydrophobic on both sides, sterile, for single use, package of 25, for use with insufflation units with a maximum gas flow of 50 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®, ENDOFLATOR® 40 and ENDOFLATOR® 50)	STERILE 	•	•
	UI 004	Insufflation Tube , sterilizable, inner diameter 9 mm, length 250 cm		•	•
	031622-10	Insufflation Tubing Set with Gas Filter , length 400 cm, two patient-side tube connections, hydrophobic on both sides, sterile, for single use, package of 10, for use with insufflation units with a maximum gas flow of 30 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®, ENDOFLATOR® 40 and ENDOFLATOR® 50)	STERILE 	•	•
	26120 J	VERESS Pneumoperitoneum Needle , with spring-loaded blunt inner cannula, LUER-Lock, autoclavable , diameter 2.1 mm, length 10 cm		•	•
	30103 HP	HICAP® Trocar , size 11 mm, color code: green		•	•

Insufflators

HAMOU® MICRO-HYSTEROFLATOR® SCB

Components / Spare Parts

Catalog page

- 26431508-1** HAMOU® MICRO-HYSTEROFLATOR® SCB
- 26431520-1 HAMOU® MICRO-HYSTEROFLATOR®, power supply 100 – 240 VAC, 50/60 Hz
- 20400042 **Silicone Tubing Set**, sterilizable
- 20400030 **Universal Wrench**
- 20090170 **SCB Connecting Cable**, length 100 cm
- 031123-10* **Gas Filter**, for single use, sterile, package of 10

U 6



26431520-1

Spare Parts



2027590
Mains Fuse,
T 2.0 AL (SB),
package of 10

Components / Spare Parts

Catalog page

- 20400022** CO₂ High Pressure Tube
- 20400028** CO₂ High Pressure Tube

U 8

U 8

Spare Parts



2903390
Seal, for use with
CO₂ bottle, Pin-Index
connector



Components / Spare Parts

Catalog page

- 20400021** CO₂ High Pressure Tube
- 20400027** CO₂ High Pressure Tube

U 8

U 8

Spare Parts



2903490
Seal, for use with
CO₂ bottle, German
connection



Components / Spare Parts

Catalog page

- 20400042** **Silicone Tubing Set**

U 7

Spare Parts



600007
**LUER-Lock Tube
Connector**, male,
tube diameter 6 mm



600008
**LUER-Lock Tube
Connector**, female,
tube diameter 6 mm





Butelie otel (10 litri)

Buteliile pentru gaze comprimate cu conectare DIN-477 sunt destinate transportului, stocarii si distributiei unei game variate de gaze cum ar fi: oxigen, hidrogen, azot, metan, amestecuri de gaze, heliu etc. Aceste butelii sunt utilizate in mod curent in procesele de sudare, taiere oxigaz si procese conexe, ca rezervoare de combustibil, de oxigen (pentru aparate medicale) etc.

Material: 34CrMo4

Presiunea de incarcare: 200 bar

Presiunea de testare: 300 bar



- UH 300

AUTOCON® III 300, without CE certification,
power supply 220 – 240 VAC, 50/60 Hz
including:

Mains Cord

HF connecting sockets unipolar:
3-pin US type
5 mm connector KARL STORZ/Erbe VIO

HF connecting sockets bipolar:
2-pin US type (28.58 mm)
2x KARL STORZ/Erbe VIO

Connecting socket:
Neutral Electrode 2-pol

Can be integrated into OR1™ with KARL STORZ OR1™ SCB control
WU 300. System requirements: SCB-R-UI Software Release
20090001-46 or higher.
- UH 300E

Same, with CE certification,
power supply 220 – 240 VAC, 50/60 Hz
- UH 300U

Same, without CE certification,
power supply 100 – 127 VAC, 50/60 Hz
- UH 300UE

Same, with CE certification,
power supply 100 – 127 VAC, 50/60 Hz

Specifications:

Max. power	unipolar: 400 Watt (at 100 Ohm) bipolar: 200 Watt (at 75 Ohm)	Output frequency	350 kHz/1 MHz
Power supply	220 – 240 VAC, 50/60 Hz (UH 300, UH 300E) 100 – 127 VAC, 50/60 Hz (UH 300U, UH 300UE)	Dimensions w x h x d	447 x 177 x 457 mm
Weight	1.8 kg	Certified to	IEC 60601-1
Sockets	Unipolar sockets: 1 Bipolar sockets: 1 (can be expanded to 2)		

Optional Accessories for AUTOCON® III 300 see page U 42
Components/Spare Parts see chapter 18

AUTOCON® III 300

High Frequency Surgery Units,
System Components

STORZ
KARL STORZ — ENDOSKOPE

UNIT SIDE
PATIENT SIDE

One-Pedal HF Footswitch



UF 901

Two-Pedal HF Footswitch



UF 902



Connecting Cable



27806 US

Neutral Electrode



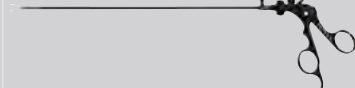
27802

Unipolar High Frequency Cord



26005 M

CLICKline® KELLY Dissecting and
Grasping Forceps



33351 MD

Coagulation and Dissection Electrode,
L-shaped



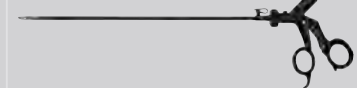
26775 UF

Bipolar High Frequency Cord



26176 LE

ROBI® KELLY Dissecting and
Grasping Forceps



38651 MD

Bipolar Ball Electrode



26183 TZ

10-171

HIGH FREQUENCY SURGERY UNITS

Accessories

Unipolar High Frequency Cords

Unipolar High Frequency Cords



KARL STORZ High Frequency
Instrument Surgical Units

	26002 M	Unipolar High Frequency Cord , with 4 mm plug for models KARL STORZ, Erbe type T, older models and Ellman, length 300 cm
	26004 M	Unipolar High Frequency Cord , with 4 mm plug for models Berchtold and Martin, length 300 cm
	26005 M	Unipolar High Frequency Cord , with 5 mm plug for AUTOCON® II 400 SCB system (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ AUTOCON® system (50, 200, 350) and Erbe type ICC, length 300 cm
	26006 M	Unipolar High Frequency Cord , with 8 mm plug for models KARL STORZ AUTOCON® II 400 SCB system (112, 116) and Valleylab, length 300 cm

Please note: All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.

Skull Base and Endoscopic Pituitary Surgery

Accessories, High Frequency Cords,
for use with TAKE-APART® bipolar forceps

Bipolar High Frequency Cords

KARL STORZ Instrument

High Frequency Surgical Units



	26176 LE	Bipolar High Frequency Cord , for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® system (50, 200, 350), Erbe-Coagulator, T and ICC series, length 300 cm
	26176 LM	Bipolar High Frequency Cord , for Martin and Berchtold coagulators, length 300 cm
	26176 L	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Ellman, length 300 cm
	26176 LA	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
	26176 LV	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

High Frequency Surgical Units AUTOCON® see chapter 12



Puterea (W)

2.4 kW

Tensiune (V)

150 - 250 V

Opțiuni

Cleme

Model

HTND-3kVA

Tensiunea la ieșire (V)

230 V

Număr de faze

Monofazat

Brand

Himel

Tip

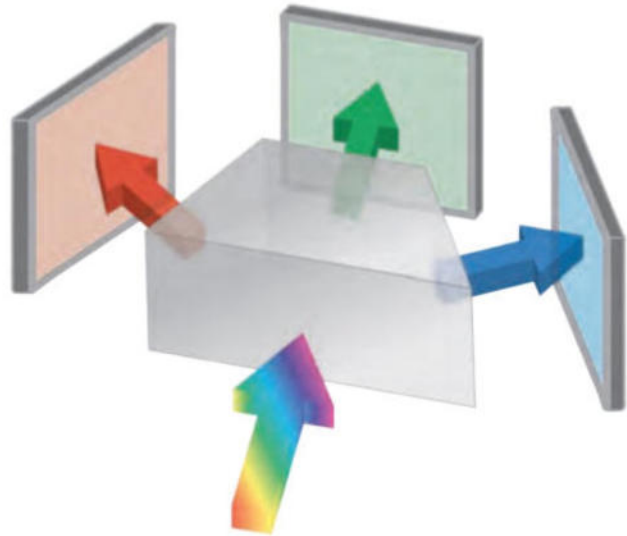
Releu

Metoda de prindere

Pe podea

Special Features:

- Best image quality and display due to sensor chip technology
- Enhanced signal quality through Digital Signal Processing (contrast and filter enhancement for rigid, semirigid and flexible endoscopes)
- Optimal image size display, regardless of the telescope used, thanks to patented Parfocal Optical Zoom Lens
- Simplified operation reduces camera movement to, e.g., prevent damage to or soiling of the lens
- Consistent illumination due to the auto-exposure system ensures seamless transitions between images, regardless of imaging area or available light
- Functionality at the touch of a button with easy -to-program operating elements via intuitive control of all functions in the sterile area
- Parameters of the OR equipment used, light sources, etc. can be displayed and controlled (KARL STORZ Communication Bus) on the monitor
- Digital video output (DV) for digital recording
- Digital zoom 1 – 2x can be adjusted to 4 levels
- “Freeze Frame” function can be activated via camera head buttons or an external footswitch
- Fluorescence imaging mode available



 Zoom	Zoom: Hier können Sie die Darstellung digital vergrößern.	Zoom: This enables digital magnification of the display.	Zoom: Permite aumentar digitalmente el tamaño de la imagen.
	Adaptive Zoom (Adaptiver Zoom): Diese Funktion kann ausgewählt werden, wenn - eine IMAGE1 S CONNECT® II TC201 und ein 4U-LINK in Kombination mit den 4U Kameraköpfen TH120 oder TH121 genutzt werden. Bei Anwendung eines Weißabgleichs erkennt das System die Größe des endoskopischen Bildes unter Anwendung eines individuell optimalen Zoomfaktors. Das endoskopische Bild wird bei kleinen Optiken gezoomt, um das Display vertikal zu füllen. Bei Optiken bei denen das endoskopische Bild die vertikalen Grenzen bereits überschreitet, wird auf Vollbild gezoomt, wobei möglichst wenige Peripherieinformationen verloren gehen. ❗ HINWEIS: Führen Sie vor jedem Gebrauch einen Weißabgleich durch. ❗ HINWEIS: Wenn das Endoskop während der Operation ausgetauscht werden muss, führen Sie einen Weißabgleich durch, um die endoskopische Bildgröße richtig zu erkennen. - eine IMAGE1 S CONNECT® I TC200 oder IMAGE1 S CONNECT® II TC201 und ein D3-LINK in Kombination mit einer 4 mm TIPCAM®1 S 3D genutzt werden. Wenn die Funktion aktiviert ist, wird das endoskopische Bild beim Einstecken der TIPCAM auf ein Vollbild aufgezoomt. - eine IMAGE1 S CONNECT® I TC200 oder IMAGE1 S CONNECT® II TC201 und ein X-LINK in Kombination mit den C-MOS-basierten X-Line Videoendoskopen genutzt werden. Wenn die Funktion aktiviert ist, wird das endoskopische Bild beim Einstecken der X-Line Videoendoskope optimal aufgezoomt.	Adaptive Zoom: that function can be selected if - an IMAGE1 S CONNECT® II TC201 and a 4U-LINK are used in combination with the 4U camera heads TH120 or TH121. When applying a white balance, the system will detect the size of the endoscopic image, applying an individually and optimal zoom factor. Small scopes will be zoomed to fit into the vertical borders of the display. Scopes exceeding the vertical borders are zoomed to full screen with minimal loss of peripheral information. ❗ NOTE: Perform a white balance before every use. ❗ NOTE: If the endoscope must be exchanged during surgery, perform white balance for proper detection of the endoscopic image size. - an IMAGE1 S CONNECT® I TC200 or IMAGE1 S CONNECT® II TC201 and a D3-LINK can be used in combination with a 4 mm TIPCAM®1 S 3D. If the function is activated, the endoscopic image is zoomed to a full screen when the TIPCAM is inserted. - an IMAGE1 S CONNECT® I TC200 or IMAGE1 S CONNECT® II TC201 and an X-LINK can be used in combination with the C-MOS-based X-Line video endoscopes. If the function is activated, the endoscopic image is optimally zoomed up when the X-Line video endoscopes are inserted.	Zoom adaptable ("Adaptive Zoom"): puede seleccionarse esta función si: - se usan un IMAGE1 S CONNECT® II TC201 y un 4U-LINK en combinación con los cabezales de cámara 4U TH120 o TH121. Al ejecutar un balance de blancos, el sistema detectará el tamaño de la imagen endoscópica, aplicando un factor de zoom individual y óptimo. En los endoscopios pequeños se aplicará un factor de zoom para ajustar la imagen a los bordes verticales de la pantalla. En el caso de los endoscopios que sobresalgan de los bordes verticales, se aplica un factor de zoom para que la imagen se ajuste en modo pantalla completa con una pérdida mínima de información periférica. ❗ NOTA: Antes de cada aplicación, lleve a cabo un balance de blancos. ❗ NOTA: Si fuera necesario sustituir el endoscopio durante la intervención quirúrgica, realice un balance de blancos para la detección adecuada del tamaño de la imagen endoscópica. - se usan un IMAGE1 S CONNECT® I TC200 o IMAGE1 S CONNECT® II TC201 y un D3-LINK en combinación con una TIPCAM®1 S 3D de 4 mm. Si la función está activada, se ajustará la imagen endoscópica a pantalla completa al insertar la TIPCAM. - se usan un IMAGE1 S CONNECT® I TC200 o IMAGE1 S CONNECT® II TC201 y un X-LINK en combinación con los videoendoscopios X-Line basados en C-MOS. Si la función está activada, se ajustará de forma óptima la imagen endoscópica al insertar los videoendoscopios X-Line.

[Home page](#) > Online Catalog - Human Medicine



Item no: 495NCSC

Fiber Optic Light Cable, 250 cm, Ø4.8 mm

Quantity:

[On the offer list](#) 

Technical details

Documents & Films

Product group / field of application

Length	250 cm
Diameter	4.8 mm
Cable connection light source	Straight
Cable connection telescope	Straight
Safety lock	Yes
Fluorescence imaging (NIR/ICG) (CE)	Yes
Fluorescence imaging (NIR/ICG) (FDA)	No
Fluorescence imaging (Blue Light Imaging, BLI)	No
Heat resistance	High
Enhanced light transmission	Yes
Light cable type	Fiber optic
Autoclavable	Yes (at 134°)
Number of instrument ports	1



PREMIUM CYLINDER REGULATOR SERIES

GCE ProControl[®]

*"We challenged our skilled engineers to develop follower of our top-seller Dincontrol which has been presented in the market already for 18 years and has become a leader among the premium cylinder regulators in terms of **Accuracy, Safety, and Reliability**. We made a few modifications to ensure keeping the focus on these three main features. From customer feedback, we have seen the weakest part of the regulator has been the gauges. We are now adding **Durability** to the features of GCE ProControl[®] by **protecting the gauges** to minimise the risk of breakdown and user productivity interruption. The investment in gauge protection is paid back in a very short time."*

GCE Team

HIGHLY DURABLE REGULATOR

Mechanical damages are the most frequent and most costly reason for regulator failure. It happens usually during transport of the installed oxy-fuel sets, during cylinder exchange or when transporting heavy parts and constructions on the cranes in the welding areas. The improved, robust gauge protection minimizes production breaks, service, and replacement cost and saves the gas leaking through broken gauges.

HIGH OPERATION SAFETY

GCE ProControl[®] has been designed for use with all common technical gases up to 300bar cylinder pressure. All safety-related specifics of the oxygen and flammable gases, as well as high-pressure hazards, have been considered in product design. It has passed a full set of type tests conforming to ISO 2503. The product safety has been also proven by long-term field test with selected users making various applications.

PRECISE ADJUSTMENT

Gas pressure and flow accuracy are the main parameters which the user requires from the pressure regulator. But GCE ProControl[®] users do not need to know that. They just use the gas for the application they are working with.

ERGONOMIC DESIGN

9 of 10 users have confirmed they like to work with GCE ProControl[®]. When fitted on the cylinder valve the position of the pressure adjusting mechanism makes setting easy. Outlet shut-off valve in the right position gives the chance to switch off the gas flow without depressurising the regulator. This also increases the lifetime of the internal parts and saves cost with operation breakdowns and related services. Pressure gauges with three main unit high-contrast scales allow reading the set value also in difficult light conditions. The Instruction for Use can be scanned from the QR code present on the product label during all its lifetime.

SUITS TO APPLICATION

GCE ProControl[®] fits users of common technical gases because product variants specific for all markets, gases, and pressures are available.

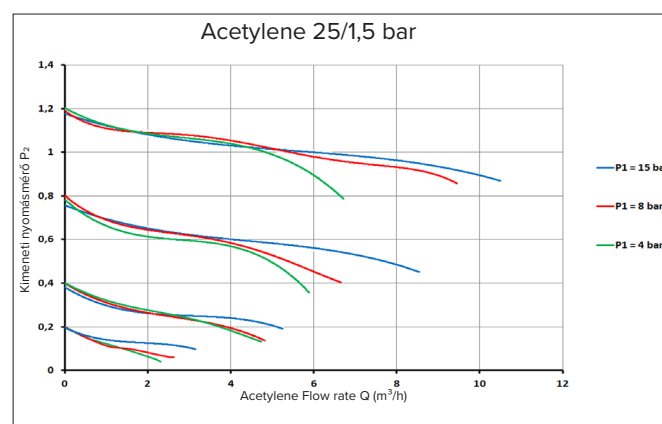
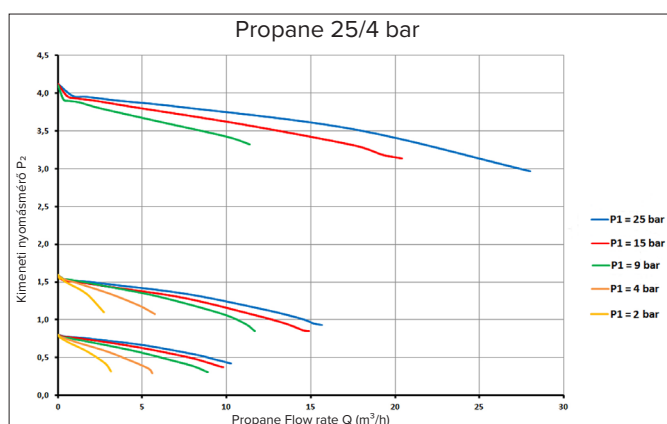
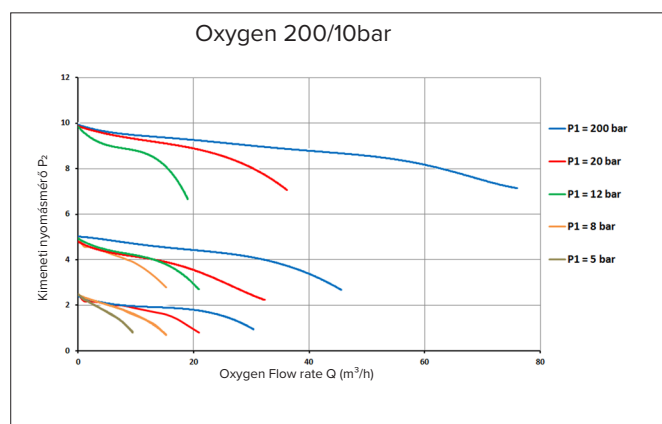
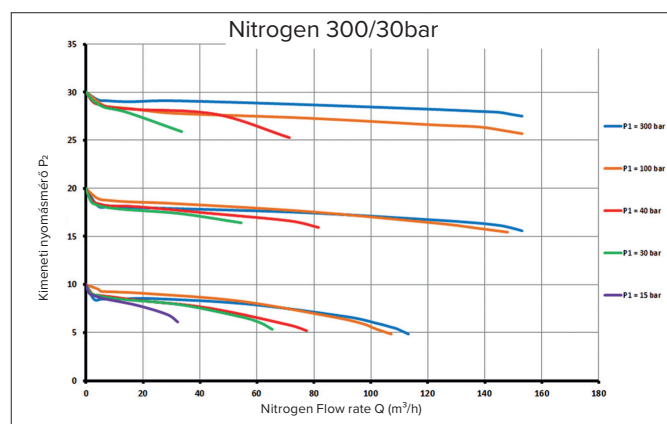
FEATURES

- **High-performance** regulator following all common technical gas applications needs
- **Safety** focused design following ISO 2503
- **Robust** rubber gauge **protection** with back lid preventing damages and impurities
- Prolonged lifetime **saving costs** related to services, spares, and replacements
- Encapsulated regulating technology for **precise** parameters **stability**
- Easy handling for the operator by **ergonomic** arrangement
- Three scale pressure gauges acc. to ISO 5171 with high contrast pointer for **better** gas pressure **clarity**

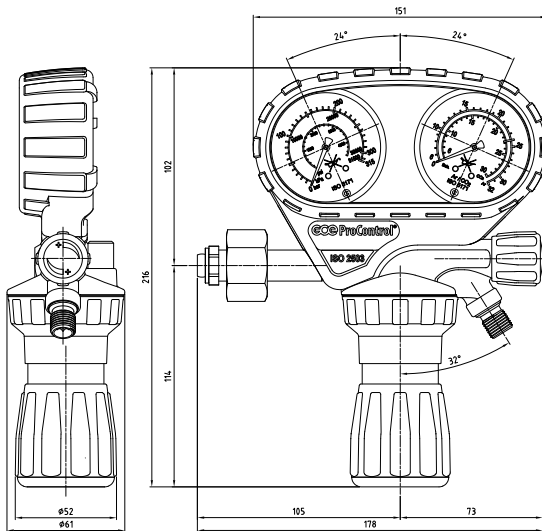
TECHNICAL DATA

Gas	O ₂ , N ₂ , H ₂ , He	Ar, Ar/CO ₂ , GF*	CO ₂	Acetilene	Propane
Body	Brass forged				
Bonnet	Zn/Al alloy Die Cast				
Stems, nuts and fittings	Brass				
Diaphragm	EPDM				NBR
Seat sealing	PA			CR	
Inlet/ Outlet connection	Gas specific connection				
Maximal inlet pressure	200 or 300 bar		200 bar	25 bar	
Outlet pressure/ flow range	0-10 bar	0-16l/min 0-24l/min 0-30l/min GF: 0-50l/min*		1,5 bar	4 bar
	0-20 bar				
	0-30 bar				
	0-50 bar				
Temperature range	From -20°C to 60°C				
Weight	Approx. according to gas variant: 1,9 kg				
Pressure relief valve	Used in all variants				

* F.G. ... Forming gas



PRODUCT ADVANTAGES



Pressure gauges are precise measuring instruments. They are the most sensitive regulator components exposed fully to the industrial environment. Robust rubber cap gives optimal protection against potentially rough handling. **Consumption of the spare pressure gauges is three times lower** in the markets where using gauge protections is a common habit already today, compared to markets with not protected regulators. The savings are even more significant if customer changes regulator completely.

- Increased product lifetime and operation safety
- Decreased operation shutdowns and gas lost and safety risk when leaking through damaged gauges.

Exact gas pressure measurement. Easy reading of the gas parameters with a threeunit scale and contrast pointer.

The back lid closes the rubber protection cap to eliminate dust and other impurities.



On-line instructions for use directly on the body stay available for entire regulator lifetime.



Safe operation with pre-adjusted pressure relief valve.

Outlet shut-off valve for contemporary operation breaks.

Stable gas outlet pressure and optimal flow performance for the gas application. Encapsulated regulating valve technology.

Accurate parameter setting with an optimized pressure adjusting mechanism.

Protection against humidity for the toughest conditions.

Ergonomic handwheel for easier handling.

ORDERING INFORMATION

Art. Nr.	Gas	Inlet pressure	Outlet pressure	Inlet connection	Outlet connection
PC0780624	Nitrogen	200 bar	10/16 bar	W24,32x1/14"	G1/4"
PC0780973	Nitrogen	200 bar	30/60 bar	W24,32x1/14"	G1/4"
PCARV0835	Nitrogen	200 bar	50/80 bar	W24,32x1/14"	G1/4"
PC0780650	Ar/CO ₂	200 bar	24 l/min	W24,32 x 1/14"	G1/4"
PC0780847	Forming gas	200 bar	50 l/min	W21,8 x 1/14" LH	G3/8" LH
PC0780855	Ar/CO ₂	200 bar	30 l/min	W24,32 x 1/14"	G1/4"
PC0782859	Acetylene	25 bar	1,5 bar	G3/4"	G3/8" LH
PC0782908	CO ₂	200 bar	10 bar	W21,8 x 1/14"	G3/8"
PC0783702	Propane	25 bar	4 bar	0,885"x1/14" LH	G3/8" LH
PC0870057	Oxygen	200 bar	10 bar	W21,8 x 1/14"	G3/8"

More types are available. If you lack some type, please contact your GCE representative for assistance.



Rated resistance bipolar	75 Ohm
Rated resistance unipolar	100 Ohm
Control via touch screen	Yes
Bipolar sockets expandable to	2
Connection socket for footswitch	2
KARL STORZ / Erbe VIO – connection socket bipolar	2
BiVascularSafe mode	No
Can be integrated into OR1™	With SCB control WU300
System requirements OR1™ integration	SCB R-UI software, Release 20090001-46 or higher
Certification	With CE certification
Brand	AUTOCON®
Width	447 mm
Depth	457 mm
Height	177 mm
Weight	12.5 kg