

SMARTXIDE²



MEDICINE AND AESTHETICS - V²LR
SURGERY - DENTISTRY

SMARTXIDE²

**The Evolution of the CO₂ Laser
Starts with the SmartXide² System:
Unique, Versatile, Multidisciplinary**



The Code of Excellence

SMARTXIDE²

SMARTXIDE²: SCIENTIFIC KNOWLEDGE AND TECHNOLOGICAL INNOVATION

Yet another milestone in DEKA's history, the **SmartXide²** system brings together scientific know-how and technological innovation. The multidisciplinary and multifunctional features of DEKA's new **SmartXide²** system make it an authentic novelty in the world of CO₂ and diode lasers. SmartXide² comes fully equipped with a range of features and accessories that make it equally suitable for use in:

- Dermatology and Aesthetics
- V²LR (Vulvo-Vaginal Laser Reshaping)
- Surgery (ENT and Gynaecology)
- Dentistry

Each system is equipped with a complete multidisciplinary database and specific handpieces, as well as optional accessories such as the scanners or micromanipulator designed to enhance and maximise one of the four specialisations, depending on the physician's requirements.

Operators can select the most suitable configuration for their specific needs, indicating source type and power when placing their order. The accessories and maximum power levels can also be upgraded at a later date to further expand the applications.

CO₂ LASER SOURCE WITH PSD[®] TECHNOLOGY: NO-COMPROMISE VERSATILITY

The Perfect Pulse for every Application

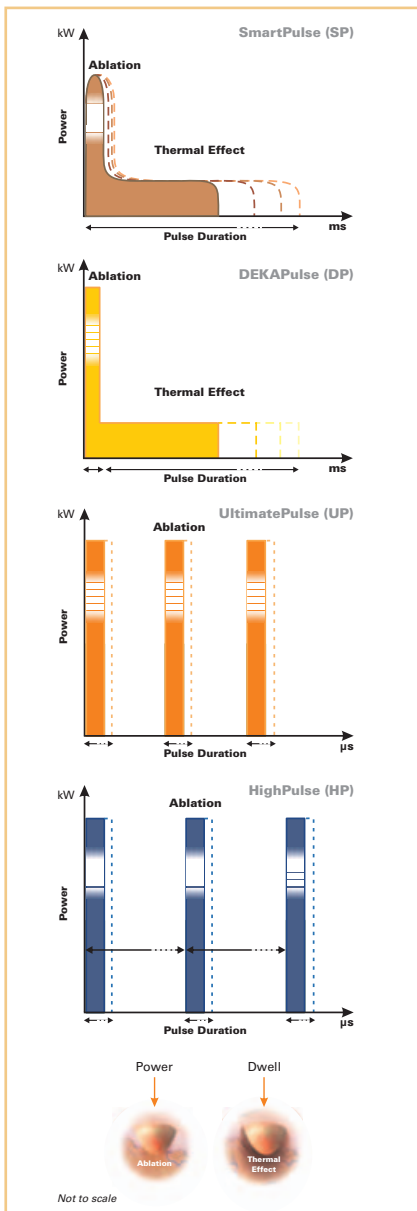
DEKA presents the first and only CO₂ laser with exclusive **PSD[®]** technology delivering total modularity of the pulse shape: S-pulse, D-pulse, H-pulse and U-pulse combine with CW mode to enhance the surgical capacity of the CO₂ laser for the specific treatment demands of every situation. The advantages for both physician and patient are obvious: it is finally possible to choose the most suitable pulse mode for each treatment, obtaining maximum benefit with minimum invasiveness and the best possible result.

DIODE LASER WITH FIBRE OPTIC EMISSION

SmartXide² is the only CO₂ system that offers the option of incorporating a diode laser module, even through an after-sales upgrade.

Diode lasers are well known and extensively used in many medical fields (for example in ENT and Dentistry) due to their user-friendliness and benefits that only a versatile fibre optic transmission system can offer, especially when treating hard-to-reach parts of the body.

Available with 2 different wavelengths (940 nm or 980 nm), 2 different maximum powers (30 W or 50 W), they also come with a wide range of fibre optics from 200 µm to 600 µm, either disposable or which can be sterilised as many as 10 times.





Technical Specifications of CO₂ Sources

Model	C40*	C60 and C60H	C80 and C80H
Type of Laser	CO ₂ RF - PSD®		
Wavelength	10.6 µm		
Emission Beam	TEM ₀₀		
Emission Modes	CW - SP - DP - HP	CW - SP - DP - UP - HP	
CW Power	From 0.5 to 40 W	From 0.5 to 60 W	From 0.5 to 70 W
UP Power	From 0.5 to 40 W	From 0.5 to 60 W	From 0.5 to 80 W
HP Power	From 0.1 to 4 W	From 0.1 to 8 W	From 0.1 to 15 W
DP Power	From 0.2 to 12 W	From 0.2 to 15 W	From 0.2 to 15 W
SP Power	From 0.1 to 12 W	From 0.1 to 15 W	From 0.1 to 15 W
Repetition Rate in HP, DP and SP	From 5 to 100 Hz	From 5 to 100 Hz	From 5 to 200 Hz
Emission Time	From 0.01 to 0.9 seconds.		
Delay Emission Time	From 0.3 to 5 seconds.		
Beam Delivery	Articulated arm with 7 mirrors and counterweight.		
Aiming Beam	Laser diode @ 635 nm - 5 mW. Adjustable intensity from 2% to 100%. Aiming beam OFF while lasing (DOWL).		
Internal Database	About 150 factory stored lines, upgradable by USB. Unlimited number for personalized user's lines. Possibility of storing private lines.		
Control Panel	LCD Colour Touch Screen Touch 10.4"		
Power Supply	From 100 to 230 Vac (automatic selection) 1,600 VA - 50/60 Hz.		
Dimensions** and Weight	162 (H) x 59 (W) x 56 (D) cm - 95 kg for C40, C60 and C80. 192 (H) x 59 (W) x 56 (D) cm - 100 kg for C60H and C80H. 63.8" (H) x 23.2" (W) x 22.0" (D) 267 lbs for C40, C60 and C80. 75.6" (H) x 23.2" (W) x 22.0" (D) 281 lbs for C60H and C80H.		
Application Sectors	MEDICINE AND AESTHETICS, SURGERY (ENT AND GYNAECOLOGY), V ² LR, DENTISTRY.		

* For model C40 the upgrade to C60 is available.

** Height with folded articulated arm.

Technical Specifications of Integrated Diode Source (Optional. Also available as upgrade)

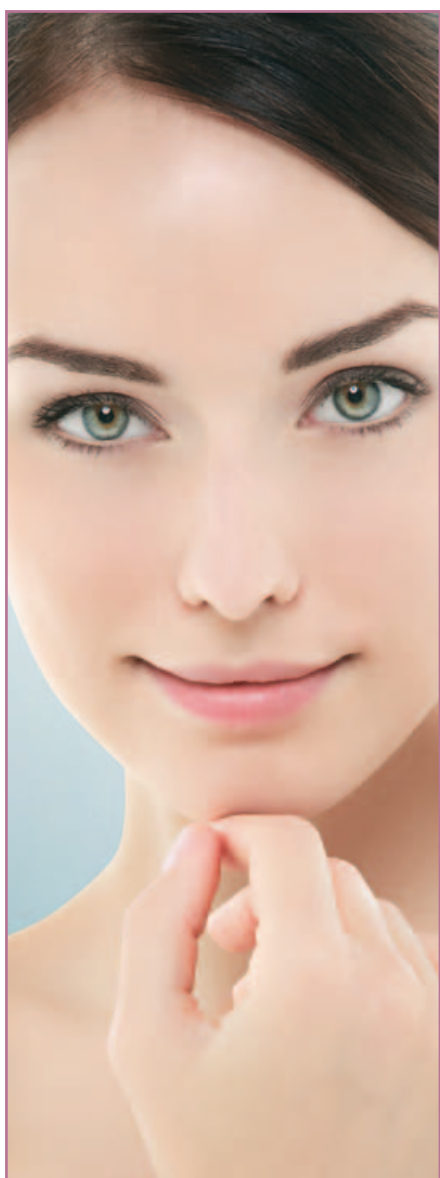
Model	D430	D830	D450 (available only for models CO ₂ C60 and C80).	D850 (available only for models CO ₂ C60 and C80).
Wavelength	940 nm	980 nm	940 nm	980 nm
CW Power	30 W		50 W	
Aiming Beam	Diode @ 635 nm - 3 mW			
Beam Delivery	200 µm to 600 µm optic fibre, disposable or sterilisable (up to 10 times).			
Application Sectors	ENT, MEDICINE AND AESTHETICS, DENTISTRY, GYNAECOLOGY.			

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HISCAN DOT/RF: COMBINED ACTION, TOTAL RENEWAL

With **HiScan DOT/RF**, DEKA has elaborated an innovative and exclusive configuration devoted to aesthetic medicine and dermatological surgery. Introducing for the very first time the combined action of CO₂ laser and bipolar RF, it is now possible to act on changes of the derma as never before. The synergy between the two action principles (CO₂ laser and RF source), allows the **HiScan DOT/RF** to selectively reach all the skin layers. This generates a perfectly controlled heating of both the surface tissues and the deeper layers, with a rapid and efficacious action that offers enormous benefits to the patient.



HiScan DOT/RF Scanner System

Max Scanning Area	15 x 15 mm
DOT Size	120 µm
Dwell Time	From 100 to 2,000 µs
Spacing of the DOT	From 0 to 2,000 µm
SmartStack Level	From 1 to 5
Scanning Shapes	DOT, Line, Triangle, Parallelogram, Hexagon, Square.
Scanning Modes	Normal, Interlaced, SmartTrack.
RF Power	From 1 to 50 W
RF Dwell Time	From 0.5 to 10 seconds.
Emission Mode	SP, DP and HP*
Application sector	DERMATOLOGY and AESTHETICS.
Applications	Fractional Skin Resurfacing (DOT Therapy), "DOT Therapy + RF" Combined Treatment, Tightening, Traditional Skin Resurfacing.

* For HiScan DOT/RF scanner system the HP emission mode is only available for C60 and C80 models.

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HISCAN V²LR (VULVO-VAGINAL LASER RESHAPING); A NEW AESTHETIC APPROACH TO FEMALE SEXUALITY

With the introduction of the Smartxide² CO₂ exclusive scanning system, **HiScan V²LR**, DEKA gives new impetus to developments in the treatment of vaginal mucosa atrophy and offers a valid alternative to hormone replacement therapy, which usually has significant side effects: DOT Therapy. When inserted into the vagina, by means of special terminals of the HiScan V²LR scanning system, the CO₂ laser acts directly on the mucosa of the vaginal walls, reshaping, toning and stimulating tissue and collagen regeneration. This treatment must be performed with a specific technique, specially developed through DEKA research, exploiting **DOT Therapy** and a pulse designed for this application, the DEKA-Pulse(or DP).



HiScan V²LR (Vulvo-Vaginal Laser Reshaping) Scanner System

Max Scanning Area	10 x 10 mm
DOT Size	200 µm
Dwell Time	From 100 to 2,000 µs
Spacing of the DOTs	From 0.1 to 2,000 µm
SmartStack Level	From 1 to 5
Scanning Shapes	DOT, Line, Square
Scanning Modes	Normal, Interlaced, SmartTrack.
Emission Mode	SP - DP
Application Sector	V ² LR (Vulvo-Vaginal Laser Reshaping)
Applications	Treatment of laxity and atrophy of the vaginal mucosa.

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HISCAN SURGICAL: NEW HORIZONS IN SCANNER-ASSISTED MICROSURGERY IN ENT AND NEUROSURGERY, COLPOSCOPIC GYNAECOLOGY

In the **HiScan Surgical** system the beam is moved by a dual galvanometer scanner, patented by DEKA, and passes through the lens of the EasySpot Hybrid micromanipulator to be focused in spots only a few microns in size. The synergic combination of the **HiScan Surgical** scanner and the EasySpot Hybrid micromanipulator enables:

- precise incisions with reduced lateral thermal damage to tissues;
- control and selection of the ablation depth of each single scan (depth mode);
- optimal scanning figures for incision and ablation of tissues.



HiScan Surgical Scanner System

Max Scanning Area	6.3 mm @ 400 mm EFL
Dwell Time	From 0.1 to 300 ms
Selectable Ablation Depth	From 0.2 to 2 mm
Scanning Modes	Power Mode and Depth Mode
Scanning Shapes	Line, arcs of circle up to complete circle, Spiral, Clover, Hexagon (progressive and interlaced scanning).
Emission Mode	CW - UP
Sector of Application	MICROSURGERY

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EASYSLOT HYBRID MICROMANIPULATOR: THE NEW GOLD STANDARD IN SURGERY

EasySpot Hybrid is designed to offer specialists a specific instrument for easy intervention and full control even in areas requiring extreme precision and utmost accuracy.

By combining two different optical systems, the **EasySpot Hybrid**, with HR (High Reflectivity) mirrors and holographic lenses, DEKA offers specialists an innovative, simple and user-friendly solution for the most complex tasks. The uniqueness of the Hybrid technology ensures a perfect focusing match between the guide beam and the CO₂ laser, making it possible to obtain the largest scanning figures available on the market today (6.3 mm).

EasySpot Hybrid Micromanipulator

Optical Technology	Holographic lens and mirrors(Hybrid).
Spot Size	Min. 140 µm Max. 4.5 mm
Operative Field @ 400 mm EFL	Min 14x10 mm - Max 70x55 mm
Functions controlled by Joystick	Rotation and dimensions of Scanning Shapes, Scan Off/Scan On, Fine-tuning of centring.

Can be used with all Microscopes



ENDOSCAN: NEW HORIZONS IN LAPAROSCOPIC GYNAECOLOGICAL SURGERY AND GENERAL SURGERY

With the new **EndoScan** scanning system, the CO₂ laser beam can also be directed inside surgical laparoscopes as a result of its ultra-miniaturised electronic components, patented and exclusive to DEKA.



EndoScan Scanning System

Max Scanning Area	5 mm @ 300 mm EFL ; 6.3 mm @ 400 mm
Dwell Time	From 100 µs to 1 ms
Scanning Shapes	Cut Mode (Point), Circle, Clover.
Emission Mode	CW - UP
Application Sector	SURGERY

SMARTXIDE² : SPECIFIC HANDPIECES FOR EACH SYSTEM

The SmartXide² system also comprises a wide range of specific handpieces for the various sectors of application: Dermatology, Aesthetic Medicine, ENT, Gynaecology, V²LR and Dentistry.



	C40	C60 - C60 H	C80 - C80 H	Dx30	Dx50	Micro Hybrid	HiScan DOT/RF	HiScan Surg	HiScan V ² LR	Endo Scan
Dermatology and Aesthetics	★★★★	★★★★	★★★★	★★★★	★★★★		★★★★			
Pharyngeal ENT	★★	★★★★	★★★★	★★★★	★★★★					
Laryngeal ENT		★★★★	★★★★	★★★★	★★★★	★★★★		★★★★		★★
Ear ENT		★★★★	★★★★	★★★★	★★★★	★★★★		★★★★		
Nose ENT	★★	★★★★	★★★★	★★★★	★★					
Endoscopic Gynaecology		★★★★	★★★★							★★
Colposcopic Gynaecology	★★	★★★★	★★★★			★★★★		★★★★		
V²LR	★★★★	★★★★	★★						★★	
Dentistry	★★	★★	★★							

★★★★ Top choice ★★★ Minimum choice ★★ Possible



MEDICINE AND AESTHETICS - V²LR SURGERY - DENTISTRY

SmartXIDE²

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VISIBLE AND INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT
Max. CW laser power @ 10.6µm: 80W
Max. pulse length: 80ms
Max. pulsed laser power @ 630-670nm: 350W
Classified by IEC 60825-1 (2007-03)

VISIBLE AND INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT
Max. diode laser power @ 980-110nm: 20W
Max. pulsed laser power @ 630-670nm: 350W
Classified by IEC 60825-1 (2007-03)



The Code of Excellence

Dealer stamp



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DEKA The Code of Excellence

A spin-off of the Ei.En. Group, DEKA is a world-class leader in the design and manufacture of lasers and light sources for applications in the medical field. DEKA markets its devices in more than 80 countries throughout an extensive network of international distributors as well as direct offices in Italy, France, Germany, Japan and USA. Excellence is the hallmark of DEKA's experience and recognition garnered in the sphere of R&D in over thirty years of activity. Quality, innovation and technological excellence place DEKA and its products in a unique and distinguished position in the global arena. DEKA manufactures laser devices in compliance with the specifications of Directive 93/42/EC and its quality assurance system, certified by is in accordance with the ISO 9001 and ISO 13485 standards.