UltraPulse Fractional CO2 Laser

UltraPulse® much more than a fractional laser

With six times the power of most CO2 lasers, the UltraPulse system is the laser for advanced applications. Delivering speed, versatility, performance and precision, UltraPulse easily supports a full spectrum of aesthetic and surgical capabilities.


- 6x more powerful than other CO2 lasers
- 4x the depth of penetration of any other CO2 laser (up to 4.0 mm)
- 2x the treatment speed of most CO2 lasers
- 240 Watts of power to tissue
- 225 mJ of energy
- Optimal ablation/coagulation ratio
- Effective single treatment, single pass = fast recovery
- Advanced patented technologies
- Offers the most delivery options
- Customizable with unmatched versatility in range of treatments
- Low cost consumables
- 34 FDA cleared dermatology and plastic surgery indications

Video

Optimal Versatility

<table>
<thead>
<tr>
<th>ActiveFX</th>
<th>DeepFX*</th>
<th>TotalFX*</th>
<th>SCAAR FX*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat fine lines, texture and dyschromia</td>
<td>Treat wrinkles and scars</td>
<td>Combine superficial and deep fractional effects</td>
<td>Treat deep, conspicuous and complex scars</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spot Size</th>
<th>Depth</th>
<th>Handpiece</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3mm</td>
<td>1.2mm</td>
<td>Active FX</td>
</tr>
<tr>
<td>1.3mm</td>
<td>1.2mm</td>
<td>Deep FX</td>
</tr>
</tbody>
</table>

ActiveFX—Superficial fractional ablation* for fine lines, uneven texture, dyschromia and actinic keratosis. Collimated, nonsequential scanning delivers high effect, low-downtime, single pass laser skin resurfacing, 1.3 mm spot size.

DeepFX—Deep fractional ablation* for treatment of profound wrinkles, 0.12 mm spot size.>

TotalFX—Combined superficial and deep fractional ablation* provides scar treatment, improved skin texture and resolution of fine lines and wrinkles, 1.3 mm and 0.12 mm spot size.

SCAAR FX—Synergistic Coagulation and Ablation for Advanced Resurfacing.

![ActiveFX handpiece](image)

![DeepFX handpiece](image)
CO₂ LASER ACCESSORIES
Dear Customer

Thank you for your interest in CO₂ laser applications. In this brochure you will find the world’s largest selection of accessories specifically designed for your Lumenis CO₂ laser system.

Lumenis focuses on innovation, efficacy and safety when developing products. The combination of unparalleled laser technology and innovative accessories makes CO₂ laser surgery rewarding for both physician and patient.

The content in this brochure does not show all available accessories. For detailed order information, please contact your Lumenis Representative.

Lumenis Ltd.

CONTENTS:

UltraPulse® SurgiTouch™ User Interface and Scanner

SurgiTouch™ MS 780 FlashScan User Interface and Scanner

UltraScan™ Encore™ CPG Computerized Pattern Generator

Advantages of Innovative Scanning

Advantages of SurgiTouch™ User Interface

SurgiTouch™ Scanning Applications

AcuBlade™ Robotic Microsurgery System

Laser Bronchoscope

Oral Pharyngeal and Nasal Kit

Nasal and Laryngeal Probes

OtoScan™ Ear Aeration System

Laser Handpieces

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Micromanipulators

ClearSpot™ 160
ClearSpot™ 350

MicroSlad™ Micromanipulator

ColpoSlad™ Micromanipulator

Laser Laparoscopic Couplers

Nezhat Coupler
Variable Spot VS Coupler
BeamAlign Coupler

Laser Laparoscopes

787 Single Puncture
788 Second Puncture

Other Accessories
SurgiTouch, with scanner (see page 4), is an application-guided surgery automation system for the UltraPulse Encore. It provides preset recommendations for treatment parameters and delivery device selection for ENT, gynecology, aesthetic, neurosurgery and general surgery applications. **You can now focus on the surgery – not the set up.**

SurgiTouch scanning capabilities allow you to automatically carry out innovative applications such as tonsil ablation, precise vocal cord incision, brain tissue ablation, scanning colposcopy, debulking of neoplasia, tympanic membrane fenestration and many others.

**FEATURES**
- Automatic pre-set starting parameters, by specialty and by application
- Delivery device suggestions tailored to meet multiple surgical needs
- Automatic incision and ablation through scanning with precision and ease
- Char-free tissue effects in the SurgiTouch and UltraPulse mode
- Highest pulse energy and average power of any CO₂ laser

**SPECIALTY BUTTONS**

**ENT:** Bronchoscopy, Fibromas, Laser Assisted Uvulopalatoplasty (LAUP), Myringotomy, Rhinophyma, Septal Spur Ablation/Reduction, Stapedotomy/Stapedectomy, Tonsillectomy, Turbinectomy, Vocal Cord Nodules, Polyps and Cysts, Adenoidectomy

**GYN:** Adhesiolysis, Cervical Conization, CIN, VAIN, VIN, Condyloma Acuminata, Endometriosis, Fimbrioplasty, Leukoplakia, Salpingostomy, Vaporization of Cysts, Oophorectomy, LAVH

**Neuro:** Acoustic Neuroma, Benign/Malignant Tumors (e.g. Gliomas, Meningiomas) and Cysts, Arteriovenous Malformation, Laminectomy/Laminotomy/Microdiscectomy, Intramural and Extramural Lesions, Lipomas and Large Tumors, Peripheral Neurectomy, Pituitary Gland Tumors, Posterior Fossa Tumors

**Aesthetic:** Acne Scars, Actinic Keratosis, Basal Cell Carcinoma, Burn Debridement, Laser Skin Resurfacing, Scar Revision, Wrinkle Reduction, Dyschromia, Cheilitis, Blepharoplasty, Endoscopic Brow lift, Breast Capsulotomy/Capsulectomy, Seborrheic Keratoses, Sebaceous Gland Hyperplasia, Verrucous Vulgaris, Hypertrophic Lesions, Wart Vaporization

**General:** Breast Biopsy, Cysts, Decubitus Ulcers, Mastectomy, Mammoplasty, Wound Debridement, Plantar Fasciotomy

**ORDER**
For order information, please contact your Lumenis representative
The SurgiTouch MS 780 system consists of a FlashScan scanner and a user interface with pre-set recommendations for treatment parameters and delivery devices for aesthetic, ENT, gynecology, neurosurgery and general surgery applications.

The user-friendly graphic display provides step-by-step operating instructions, shows the correct accessories and operating parameters for each procedure, and keeps the user in control of the procedure at all times.

SurgiTouch can be used with most delivery devices listed under Compact or 10S series CO₂ laser systems.

The FlashScan technology is required for the AcuBlade™, OtoScan™, and MS 780 handpiece delivery systems and procedures, such as “one shot stapes”. It is recommended for the Oral Pharyngeal and Nasal Handpiece Set, BeamAlign laparoscopic coupler, and AcuSpot™, MicroSlad™ and ColpoSlad™ micromanipulators.

UltraScan is a novel, proprietary computerized pattern generator (CPG) that provides precise control and ensures a predictable and safe tissue response. The system’s wide variety of treatment settings enables a broad range of procedures to be performed with optimal efficacy and efficiency.

- Innovative CoolScan™ provides low density, non-sequential scanning for an effective, low-downtime, single laser skin resurfacing treatment ActiveFX™ procedure. ActiveFX™ is for patients with less severe photodamage.
- For patients with heavier damage, the UltraScan CPG is the recognized gold standard for dramatic laser skin resurfacing results.

**FEATURES**
- Collimated, small spot size, down to 1.3 mm
- Wide range of density patterns, shapes, and sizes
- Rapid 600 Hz scanning for fast treatment times

**FEATURES**
- Automatic pre-set starting parameters by specialty and by application
- Automatic incision and ablation through laser beam scanning leads to a stress-free environment
- Delivery device tailored to meet multiple surgical needs
- Char-free tissue effects in SurgiTouch™ and SuperPulse™ modes
- High pulse energy and average power

**ULTRASCAN™ CPG**
WRINKLE REDUCTION | DYSCHROMIA | LASER SKIN RESURFACING | ACTINIC KERATOSIS | SCAR REVISION | WART VAPORIZATION | RHINOPHYMA

Compatible Only with the UltraPulse® Encore™ Laser System
Advantages of Innovative Laser Beam Scanning

Most Lumenis surgical accessories can be equipped with a laser beam scanner that provides for more precise and effective treatment.

**The benefits are:**
- Better results from quick and accurate scanning of treatment areas using a laser beam with a very small spot size
- Automatic incision and ablation of tissue according to predefined patterns
- Speed and precision of scanner is unmatched by hand or joystick movement
- Unparalleled char-free ablation, vaporization, excision or incision of soft tissue
- Reduced thermal damage to surrounding tissue

**TYPICAL SCANNER APPLICATIONS**
- Precise curved incision on vocal cords
- Fast and precise debulking of neoplasm
- Ablation of tonsillar cyst
- Facial skin resurfacing

**Example 1**
Fast scanning laser beam creates precise ablation area

**Example 2**
Fast scanning focused laser beam creates precise incision line

- Tympanic fenestration: very fast creation of bloodless membrane opening
- Scanning colposcopy: precise ablation of small and large area cervical lesions
- Neurosurgery: precise ablation of thin tissue layers
Advantages of SurgiTouch™ User Interface

The SurgiTouch User Interface is a built-in laser operator and allows for a stress-free environment through application of innovative technology.

**Benefits are:**

- Controlled scanning of highly focused laser beam over a predetermined scan area (up to 15 mm)
- Automatic pre-set starting treatment parameters, by specialty and by application
- Automatic selection of delivery device, tailored to meet multiple surgical needs
- Improved physician comfort as a result of automation
- Minimal or no bleeding resulting from laser surgery
- Quicker recovery times and faster healing than conventional surgery

**Example**

1. Physician wants to incise a vocal cord lesion. Vocal cord button is pressed on SurgiTouch User Interface with automatic selection of delivery device (AcuBlade).

2. New screen pops up that allows the physician to select different sizes and depths of incision or ablation patterns. In this case a curved incision 4 mm long, 4 units deep is selected. Curved incision line can be rotated by slightly twisting the micromanipulator joystick. Technical parameters appear automatically.

**SCANNING APPLICATIONS THROUGH SURGITOUCH CONTROL**

- Vocal Cords, Papillomas, Neoplasms
- Tonsil Ablation, LAUP
- Tympanic Membrane Fenestration
- Stapes Bone
- Neurosurgery
- Bronchoscopy
- Colposcopy
- Laparoscopy
- Dermal and Mucosa Lesions
- Skin Resurfacing
SurgiTouch™ Scanning Applications

**Laryngology** – Scanned linear incision on vocal cord

**Otology** – Scanned Tympanic Membrane Fenestration: 2 mm bloodless opening created in 0.2 seconds

**Otolaryngology** – Scanned ablation of tonsils

**Otolaryngology** – Scanned incision for LAUP

**Colposcopy** – Scanned ablation of cervical lesion

**Neurosurgery** – Scanned char-free ablation of tissue
ActiveFX for Pigment Dyschromia

Keratosis

Keloid Scars

Face Lift and Blepharoplasty, ActiveFX for Photodamage

Photo Credit: Dr. Barry E. DiBernardo, Dr. Joseph Niamtu III, Dr. B. Kent Remington, Dr. John P. Fezza
Two Operating Modes

Linear

AcuBlade’s precise linear incision and shaped cutting capabilities enable successful treatment of vocal cord diseases, including nodules, polyps, cysts, and vocal cord paralysis. These procedures can be executed without injuring vocal ligaments, which could result in major changes in a patient’s voice. The control available with AcuBlade reduces operating time and ensures patient safety. It can also be used in other specialized otolaryngology procedures, such as Zenker’s diverticulum.

Circular (Disk)

With its circular ablation pattern, the AcuBlade treats recurrent respiratory papillomatosis (RRP) and can further debulk other tissues (neoplasia). The superficial ablation removes papillomas with minimal thermal damage in the glottic larynx. Using the AcuBlade for laryngeal surgery accelerates healing time and diminishes the occurrence of complications.
The 781 Bronchoscope delivery system includes four different tubes and a B-L (Bronchoscope to Laser) coupler.

For Laser surgery, the B-L coupler attaches the bronchoscope to the laser unit’s articulated arm and directs the laser beam through the bronchoscope’s working channel.

For best char-free clinical results with excellent layer-by-layer control, use the 781 Bronchoscope delivery system with the Lumenis SurgiTouch user interface and scanner.

**FEATURES**

- Length: 250 mm, 350 mm, 450 mm
- Spot size: 0.6 mm - 5.6 mm
- One 350 mm tube for esophagus
- Scanning capability
- Easy detachment of laser coupler for non-laser use during surgery
Proprietary laser scanning technology has been incorporated into two unique sets of instruments for treating the uvula, soft palate, tonsils, oral mucosa and nasal septum with the CO₂ laser. The continuous variable defocus (CVD) optic allows fingertip transition from cut to ablate without procedural interruptions.

By simply changing the tips supplied with the set, straight or lateral lasing is easily accomplished. A mirror tip is also included to access those areas usually difficult to target with a direct approach.

The set may be ordered individually or as an accessory for use with the SurgiTouch scanning system, providing controlled char-free ablation.

**FEATURES**

- Effective tonsil ablation through scanning
- Spot size: 0.5 mm - 2.7 mm
- Minimal or no bleeding
- Multiple tips meet all surgical needs
- Built-in smoke evacuation

---

**Tonsil Ablation** - Reduction of inflamed tonsil and chronic tonsillitis

**Laser Assisted Uvulopalatoplasty** - Treatment for snoring and sleep apnea

**Order**

Oral Pharyngeal and Nasal Handpiece Set: AA2377300
NASAL AND LARYNGEAL PROBES
TURBINATE HYPERPLASIA | SEPTAL SPUR SURGERY | POLYPS AND CYSTS |
SYNECHIA | CHOANAL ATRESIA | LARYNGEAL STENOSIS | PAPILLOMAS

FEATURES
• Available in many angulations (90°, 20°, 0°)
• Enhanced accessibility: straight, left, right beam output
• Precision 0.8 mm spot facilitates exact cutting, ablation and vaporization with minimal thermal transfer to delicate surrounding tissues
• Available with or without smoke evacuation (nasal probes)
• Stainless steel pre-formed sheath accepts multi-use FiberLase® core, which transmits a red aiming beam for precise placement of the active beam

Technical Parameters
• Nasal Probes Length: approximately 120 mm
• Laryngeal Probe Length: approximately 190 mm
• Probes require air/inert gas flow

Lumenis' line of nasal accessories permit easy accessibility to the deepest recesses of the nasal passage and turbinate regions with the preferred CO₂ wavelength.

The probes are designed for maximum visibility with integrated smoke evacuation to maintain a clear field even within the confines of nasal specula.

Longer probes are designed for laryngeal applications, especially involving small children and infants.

14630 Nasal Probes Starter Kit

Order Nasal Probe Starter Kit: AA2603300
The proprietary OtoScan Ear Aeration system used with the CO₂ laser is indicated for laser-assisted myringotomy and related applications. The OtoScan provides the control required to create a precisely-sized pre-set hole in the tympanic membrane without bleeding or damaging surrounding structures – in just two-tenths of a second.

A miniature video otoscope, a fiber illumination bundle, and the laser delivery system are integrated in the OtoScan to share a unique optical axis for precise, safe, yet simple placement of the laser hole (round or oval). Included in the system is a set of speculum types for infants, children and adults.

**FEATURES**

- User-defined parameters provide accurate control over fenestration. (Diameter 1.0 to 3.0 mm, selectable in 0.2 mm increments)
- Minimal or no bleeding
- Very fast, painless procedure
- Speculums (3–5.5 mm): 8 units

**REQUIRES**

A complete OtoScan system requires the following to operate

- SurgiTouch
- Light source
- Video monitor

---

Order

NTSC Video Color Format: AA2940000
PAL Video Color Format: AA2960000
CO₂ laser handpieces are used for direct laser impact to the treatment site by bare hand movement. The handpieces differ in a variety of ways, depending on the intended treatment goal. Main applications are precise incision and larger area ablation. The listed handpieces cover the needs of the typical medical practitioner.

FOCUSING INCISIONAL HANDPIECES (part no. 0614-693-01)

Includes
- 0.2 mm Focused Incisional Handpiece
- 1.0 mm Focused Incisional Handpiece
- Standard Spatula Tip
- Narrow Spatula Tip
- Carrying case
Length: 130 mm (0.2 mm handpiece)
152 mm (1.0 mm handpiece)
Handpiece Barrel and Spatula Tip Sterilization: Gas or steam sterilization

Accessories
- 0614-963-01 Focused Incisional Handpiece, 0.2 mm and 1.0 mm
- 0003-2819 Focused Incisional Handpiece Mirrored Tip, 120° angle
  Inserts into handpiece barrel to reflect laser beam at 120° angle
  Sterilization: Gas sterilization
- 0003-2820 Focused Incisional Handpiece Mirrored Tip, 90° angle
  Inserts into handpiece barrel to reflect laser beam at 90° angle
  Sterilization: Gas sterilization

TRUESPOT™ 2 mm COLLIMATING HANDPIECE (Part No. 0626-210-01)
SKIN RESURFACING | ACNE SCARS | ACTINIC KERATOSIS | BASAL CELL CARCINOMA | BURN DEBRIDEMENT | SURGICAL SCAR REVISION | RHINOPHYMA

Accessories
- 0625-758-01 TrueSpot Smoke Evacuator tubing holder, distal
- 0625-759-01 TrueSpot Smoke Evacuator tubing holder, proximal
FOCUSING INCISIONAL HANDPIECE 15050 / 15125

**Working Distance**
- 15050: 50 mm working distance (F50) (0.08 mm spot)
- 15125: 125 mm working distance (F125) (0.2 mm spot)

Compatible with UltraPulse®, Compact and 10S laser systems

**Requires**
- AA1741700: Thread Adapter for use with UltraPulse CO₂ laser system

**Order**
- AA0204800: 0.08 mm Focused Incisional Handpiece (15050)
- AA0632600: 0.2 mm Focused Incisional Handpiece (15125)

SURGITOUCH™ MS 780 HANDPIECE SET FOR SKIN RESURFACING
SKIN RESURFACING | ACNE SCARS | ACTINIC KERATOSIS | BASAL CELL CARCINOMA |
BURN DEBRIDEMENT | SURGICAL SCAR REVISION | RHINOPHYMA

- Compatible only with Compact, 10S laser systems
- Requires MS 780 SurgiTouch User Interface

**Order**
- AA2775200: SurgiTouch MS 780 Handpiece Set
PERFECTION IN CO$_2$ LASER MICROSURGERY

The Lumenis 712 AcuSpot combines the established precision of AcuSpot micromanipulators with the convenience of variable working distance, from 200 to 400 mm. Offering a 160 micron laser impact spot, the 712 AcuSpot allows the utmost in precision while simultaneously reducing the amount of laser power required for the desired tissue effect.

Minimal thermal trauma and tissue necrosis assure a significant reduction in post-operative edema and promote superior healing. The AcuSpot may be further combined with Lumenis’ patented SurgiTouch™ flash scanner to enhance char-free, layer-by-layer, tissue ablation capabilities.

The revolutionary design of the 712 AcuSpot enhances convenience in laser microscopy while maintaining the clinical advantages established by hundreds of AcuSpot installations worldwide.

A mirror-based, achromatic, optical design assures perfect coincidence of the red aiming and CO$_2$ beams, even at the highest microsurgical magnifications. The dichroic, “see-through,” steering mirror maintains coaxial alignment with the microscope optics for safe and accurate delivery through pediatric laryngoscopes or other confined lumens.

**ACUSPOT™ 712 L/Z (Leica/Zeiss)**

The AcuSpot 712 L/Z has a much larger gimbal mirror, making it suitable for use on large objective lens microscopes or in cases of small microscope magnification.

**FEATURES**

- Easily adjustable and clearly indicated variable working distance from 200 mm to 400 mm
- Continuous Variable Defocus (CVD) with user-adjustable defocus limiter
- Tension adjustable, autoclavable joystick
- Ready for scanner use (SurgiTouch)
- Can be upgraded to AcuBlade™ robotic microsurgery system
- Drape ring holder, adjustable for various ring diameters
- User-selectable left- or right-hand controls
- Slim steering mirror compartment for convenient introduction of accessory surgical instruments
- Compatible with most surgical microscopes
- Lightweight 490 grams to maintain balance of surgical microscope

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**Technical Parameters**

Mirror-based, achromatic confocal. Fully coaxial with microscope optical axis.

<table>
<thead>
<tr>
<th>Working Distance</th>
<th>Spot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 mm</td>
<td>0.16 to 2.8 mm</td>
</tr>
<tr>
<td>250 mm</td>
<td>0.19 to 3.2 mm</td>
</tr>
<tr>
<td>300 mm</td>
<td>0.21 to 3.7 mm</td>
</tr>
<tr>
<td>350 mm</td>
<td>0.24 to 4.1 mm</td>
</tr>
<tr>
<td>400 mm</td>
<td>0.27 to 4.6 mm</td>
</tr>
</tbody>
</table>

**Order**

<table>
<thead>
<tr>
<th>AcuSpot 712</th>
<th>AA2630000</th>
</tr>
</thead>
<tbody>
<tr>
<td>AcuSpot 712 L/Z</td>
<td>AA3042000</td>
</tr>
</tbody>
</table>
MICROMANIPULATOR: CLEARSPOT™ 160 & 350
VOCAL CORDS | STAPEDECTOMY | NEUROLOGY | LASER COLPOSCOPY | CONDYLOMA

CLEARSPOT 160 (CS 160)
The ClearSpot 160 is a high-performance micromanipulator capable of delivering a spot size as small as 160 microns. Its advanced optical and mechanical design makes it the instrument of choice for your most demanding microsurgical procedures, such as in ENT and neurosurgery applications.

The ClearSpot 160 can be configured for a variety of microscope working distances. This attention to detail ensures proper spot size selection and delivery of laser energy.

CLEARSPOT 350 (CS 350)
The ClearSpot 350 is a general-purpose micromanipulator intended for use in a broad range of “larger spot” surgical applications, such as gynecology. Its flexible optical design can deliver spot sizes from 350 microns to 4.0 mm over a wide range of working distances.

FEATURES
- Spot size as small as 160 mm with ClearSpot 160
- ClearSpot 350 delivers a spot size of 350 microns to 4.0 mm over a wide range of working distances
- Smooth joystick manipulation with adjustable tension

Accessories, CS 160

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Focal Length</th>
<th>Spot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0619-238-02</td>
<td>200 mm</td>
<td>0.16 to 1.6 mm</td>
</tr>
<tr>
<td>0619-239-02</td>
<td>250 mm</td>
<td>0.19 to 2.9 mm</td>
</tr>
<tr>
<td>0619-240-02</td>
<td>300 mm</td>
<td>0.22 to 4.3 mm</td>
</tr>
<tr>
<td>0619-241-02</td>
<td>350 mm</td>
<td>0.26 to 5.6 mm</td>
</tr>
<tr>
<td>0619-242-02</td>
<td>400 mm</td>
<td>0.27 to 7.6 mm</td>
</tr>
</tbody>
</table>

The ClearSpot 160 price includes any two of the above focal length lenses. Additional lenses may be ordered later.

Note: Additional lenses have to be calibrated to the system. To do so, the ClearSpot 160 has to be sent to the Lumenis Service Department. Therefore, please consider your needs at time of order placement.

Technical Parameters, CS 350

The ClearSpot 350 uses a single focal length lens barrel, which is adjustable from 200 to 400 mm. Spot sizes on the ClearSpot 350 are according to the table below:

<table>
<thead>
<tr>
<th>Focal Length</th>
<th>Spot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 mm</td>
<td>0.35 to 1.5 mm</td>
</tr>
<tr>
<td>250 mm</td>
<td>0.46 to 2.2 mm</td>
</tr>
<tr>
<td>300 mm</td>
<td>0.57 to 2.7 mm</td>
</tr>
<tr>
<td>350 mm</td>
<td>0.64 to 3.3 mm</td>
</tr>
<tr>
<td>400 mm</td>
<td>0.76 to 4.0 mm</td>
</tr>
</tbody>
</table>

Order
ClearSpot 160 0621-142-02
ClearSpot 350 0617-744-01
ClearSpot 160 MD1 0621-143-01
ClearSpot 350 MD1 0617-793-01

The MicroSlad micromanipulator provides ease of attachment with maximum surgical versatility. By simply inserting the desired lens slide, from 200 to 400 mm working distance, all routine microscope cases can be accommodated.

The slim design permits ease of draping and the Continuously Variable Defocus (CVD) optical system allows spot size selection from 0.35 mm (at 200 mm working distance) to 8.3 mm (at 400 mm working distance).

Lumenis micromanipulators are manufactured to the most critical optical standards, with easy-to-clean hot mirrors and variable tension joysticks for precise placement on targeted tissue. Optional adapters are available for most popular microscopes. For high-quality general use micromanipulation at minimal cost, the MicroSlad will meet your most stringent requirements.

For best char-free clinical results with best layer-by-layer control, use the MicroSlad micromanipulator with the Lumenis SurgiTouch™ scanner system.

**FEATURES**
- High precision for superficial lesions
- Ability to treat irregular shapes
- Excellent visualization and depth control
- Reduced thermal necrosis (char-free laser does not restrict pathological examination)
- Ready for SurgiTouch™ scanner use
- Scanning Laser Colposcopy (SLC). Scan size up to 7 mm in diameter

**Models**
- **MicroSlad 715**: for use with most dovetail-style microscope and colposcope adapters. Straight entry port.
- **MicroSlad 716**: for use with most Leica (Wild) microscopes. Straight entry port.
- **MicroSlad 717**: same as MS 719, but left entry port for microscopes, right entry port for colposcopes.
- **MicroSlad 718**: same as MS 719, but right entry port for microscopes, left entry port for colposcopes.
- **MicroSlad 719**: for use with most ring-style microscope and colposcope adapters. Straight entry port.

**Technical Parameters**

<table>
<thead>
<tr>
<th>Working Distance (Lens Slide)</th>
<th>MicroSlad 715 Spot Size</th>
<th>MicroSlad 716 Spot Size</th>
<th>MicroSlad 717/718 Spot Size</th>
<th>MicroSlad 719 Spot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 mm</td>
<td>0.41 to 3.9 mm</td>
<td>-</td>
<td>0.50 to 4.8 mm</td>
<td>0.41 to 3.9 mm</td>
</tr>
<tr>
<td>250 mm</td>
<td>0.50 to 4.8 mm</td>
<td>0.60 – 6.0</td>
<td>0.59 to 5.6 mm</td>
<td>0.50 to 4.8 mm</td>
</tr>
<tr>
<td>275 mm</td>
<td>0.54 to 5.3 mm</td>
<td>-</td>
<td>0.63 to 6.2 mm</td>
<td>0.54 to 5.3 mm</td>
</tr>
<tr>
<td>300 mm</td>
<td>0.59 to 5.8 mm</td>
<td>0.50 – 7.0</td>
<td>0.69 to 6.4 mm</td>
<td>0.59 to 5.1 mm</td>
</tr>
<tr>
<td>350 mm</td>
<td>0.69 to 6.5 mm</td>
<td>0.60 – 8.6</td>
<td>0.76 to 7.4 mm</td>
<td>0.69 to 6.5 mm</td>
</tr>
<tr>
<td>400 mm</td>
<td>0.76 to 7.5 mm</td>
<td>-</td>
<td>0.85 to 8.3 mm</td>
<td>0.76 to 7.5 mm</td>
</tr>
</tbody>
</table>

**Order**
- MicroSlad 715: AA0886700
- MicroSlad 716: AA2658200
- MicroSlad 717: AA0853200
- MicroSlad 718: AA0846200
- MicroSlad 719: AA0631900

Lens Slides 300 mm and 400 mm are standard equipment for all MicroSlad models except MS 716. Additional lens slides can be ordered.
MICROMANIPULATOR: COLPOSLAD™
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN) | VAGINAL INTRAEPITHELIAL NEOPLASIA (VAN) | VULVAR INTRAEPITHELIAL NEOPLASIA (VIN) | CONDYLOMA ABLATION | LEUKOPLAKIA (VULVAR DYSTROPHIC) | CERVICAL CANCER

725 COLPOSLAD

The 725 ColpoSlad (Colposcope Laser Adapter Device) is a CO2 laser micromanipulator for coupling the CO2 surgical laser system to a Leisegang Model I, II or ID300 colposcope, thus enabling the application of the CO2 laser under direct colposcope guidance.

The 725 ColpoSlad incorporates the Continuously Variable Defocus (CVD) optical system for varying spot size, and a joystick for controlling beam position.

726 COLPOSLAD

The 726 ColpoSlad (Colposcope Laser Adapter Device) is a CO2 laser micromanipulator for coupling the CO2 surgical laser system to an Olympus OCS, OCS-2 and OCS-3 colposcope, thus enabling the application of the CO2 laser under direct colposcope guidance.

The 726 ColpoSlad incorporates a Continuously Variable Defocus (CVD) optical system for varying spot size, and a joystick for controlling beam position.

FEATURES

- High precision for superficial lesions
- Ability to treat irregular shapes
- Excellent visualization and depth control
- Reduced thermal necrosis (char-free laser does not restrict pathological examination)
- Ready for SurgiTouch™ scanner use
- Scanning Laser Colposcopy (SLC). Scan size up to 7 mm in diameter

NEW

Technical Parameters

<table>
<thead>
<tr>
<th></th>
<th>Working Distance</th>
<th>Spot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>725 ColpoSlad</td>
<td>300 mm</td>
<td>0.64 to 4.7 mm</td>
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<tr>
<td>726 ColpoSlad</td>
<td>300 mm</td>
<td>0.59 to 3.0 mm</td>
</tr>
</tbody>
</table>

Order

|       | 725 ColpoSlad | AA0852000
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>726 ColpoSlad</td>
<td>AA0631700</td>
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</table>
NEZHAT LAPAROSCOPIC COUPLER

The Nezhat Laparoscopic Coupler provides reliable, trouble-free delivery of the laser beam through the operative channel of the laparoscope. There is no requirement for adjustments or complicated alignment procedures.

Simply connect the coupler to the laparoscope, and the beam is aligned and ready to use. The patented self-alignment feature eliminates laser beam interference with the wall of the laparoscope. Laparoscope adapters are specifically designed to meet the mechanical specifications of all major laparoscopes.

Includes one laparoscope adapter of customer’s choice.

VARIABLE SPOT VS COUPLER

The Variable Spot Coupler provides an easy, predictable means to vary the spot size through the operating channel of a laparoscope.

The stable, small spot size is ideal for precise cutting procedures. A large spot is advantageous for large area ablation or when lower energy density is desired for greater homeostasis.

Includes one laparoscope adapter of customer’s choice.

FEATURES

Nezhat Laparoscopic Coupler
- Precise laparoscopic alignment every time
- Eliminates joysticks and alignment rings
- Single connection simplifies setup
- Compatible with a wide variety of laparoscopes

Variable Spot VS Coupler
- Variable spot size provides precise, small spot cutting or broad spot ablation at a single touch
- Second Puncture Coupler

Technical Parameters

<table>
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<tr>
<th></th>
<th>Spot Size</th>
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<tbody>
<tr>
<td>Nezhat Laparoscopic</td>
<td>1.2 mm</td>
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<tr>
<td>Variable Spot VS</td>
<td>1.2 to 3.0 mm</td>
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</tbody>
</table>

Order
Nezhat Coupler: 0617-0621-01
Variable Spot VS Coupler: 0618-989-01

For order information about Nezhat Adapters, please contact your Lumenis representative.
BEAMALIGN

The BeamAlign Direct Coupler, for 300 mm single puncture operating laparoscopes, is designed to automatically compensate for all optical and mechanical anomalies associated with laser beam delivery down an operating channel. BeamAlign includes the Continuous Variable Defocus (CVD) unit, which enables application of various laser beam spot sizes without changing the working distance. Tissue effect can be instantaneously varied to obtain optimal incision, ablation or coagulation, as required.

The unique BeamAlign coupler also provides an airtight fit with the laparoscope.

Once aligned, the coupler remains with the scope throughout the cleaning and sterilization cycle, ready for the next procedure.

The 300 mm BeamAlign Direct Coupler is factory aligned. If there is misalignment, the direct coupler should be aligned with the Model 16100 Direct Coupler Alignment tool.

FEATURES

• SurgiTouch™ scanner can be connected to BeamAlign Laparoscopic adapter

Includes

• CVD optical unit (300 mm)
• Aligning connector
• Adapters 19620 and 19621
• Polar adapter
• Insufflation adapter
• Spare O-rings

Requires

AA1741700 Thread Adapter for use with UltraPulse®

Other Accessories

AA2329500 Model 16100 Direct Coupler Alignment tool
AA2330500 Second Puncture Coupler

Order

Beam Align Direct Coupler, 300 mm Single Puncture: AA2330600
787 SINGLE PUNCTURE LASER LAPAROSCOPE SET

With the 787 Single Puncture Laser Laparoscope Set, tissue effects can be instantaneously varied to obtain optimal incision, ablation or coagulation, as required. The 300 mm BeamAlign Direct Coupler, included with the set, is factory aligned. If there is misalignment, the direct coupler should be aligned with the Model 16100 Direct Coupler Alignment tool.

The 787 is compatible with SurgiTouch™, which allows scanning the treatment beam through the laparoscope for the treatment of larger areas and char-free layer-by-layer ablation.

The set can be used in both conventional and CO₂ laser surgery applications.

Includes
- 300 mm CVD optical unit
- Single puncture tube with telescope (Laparoscope)
- Outer diameter: 11.3 mm
- Operating channel diameter: 7.3 mm
- Trocar with a trocar sleeve
- Stopcock assembly with rubber instrument guide
- 16300 BeamAlign direct coupler for coupling the laparoscope to the articulated arm of the CO₂ laser unit
- Silicone Oil & Luer Lock male connectors
- Spare rubber washer
- Spare rubber instrument guides
- Continuous Variable Defocus (CVD) unit, which enables application of various laser beam spot sizes without changing the working distance

788 SECOND PUNCTURE LASER LAPAROSCOPE SET

With the 788 Single Puncture Laser Laparoscope Set, tissue effect can be instantaneously varied to obtain optimal incision, ablation or coagulation, as required. The 200 mm BeamAlign Direct Coupler, included with the set, is factory aligned. If there is misalignment, the direct coupler should be aligned with the Model 16100 Direct Coupler Alignment tool.

The 788 is compatible with SurgiTouch, which allows scanning the treatment beam through the laparoscope for the treatment of larger areas and char-free layer-by-layer ablation.

The set can be used in both conventional and CO₂ laser surgery applications.

Includes
- 200 mm CVD optical unit
- Second Puncture Laparoscope inner tube
- Second Puncture open end outer tube
- Second Puncture hook – tipped outer tube
- Trocar
- 8 mm trocar sleeve
- Stopcock assembly
- 16200 BeamAlign direct coupler
- Silicone Oil
- Luer Lock male connector (x2)
- Trocar sleeve rubber washer (x2)

FEATURES
- Instantaneous spot size change (0.6 mm – 4.5 mm)
- Scanning through laparoscope with SurgiTouch scanner

Order
787 Single Puncture Laser Laparoscope Set: AA2602700
788 Second Puncture Laser Laparoscope Set: AA2602800
### OTHER ACCESSORIES

#### CO₂ Laser Goggles and Glasses

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>MD1497700</td>
<td>19401 CO₂ laser glasses</td>
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<tr>
<td>MD1657300</td>
<td>19403 CO₂ laser glasses (with CE mark)</td>
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<tr>
<td>0617-008-01</td>
<td>CO₂ safety glasses (ANSI standard)</td>
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<tr>
<td>5400-0035</td>
<td>CO₂ safety glasses (for workshop use only)</td>
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#### Thread Adapter Set

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>AA1743300</td>
<td>Thread Adapter Set</td>
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<tr>
<td></td>
<td>Includes:</td>
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<tr>
<td></td>
<td>• Thread Adapter (silver) without Lens (AA3032700) for FiberLase® delivery devices</td>
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<tr>
<td></td>
<td>• Thread Adapter (blue) with Lens (AA1741700) for all ex-Sharplan® delivery devices except FiberLase</td>
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<tr>
<td></td>
<td><em>Compatible with UltraPulse® laser system</em></td>
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#### Smoke Evacuators

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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>3303-0254</td>
<td>Buffalo® Whisper® Turbo Smoke Evacuator (100V, 50/60 Hz)</td>
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<tr>
<td></td>
<td>Includes:</td>
</tr>
<tr>
<td></td>
<td>• PlumeSafe® Whisper Turbo Smoke Evacuation</td>
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<tr>
<td></td>
<td>• Unit with pneumatic footswitch</td>
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<tr>
<td></td>
<td>• ViroSafe® 6 filter – 6 hour double port 0.875&quot; and 1.125&quot;</td>
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<td></td>
<td>• VTWT324 – 0.875&quot; x 6&quot; tubing with wand and tips (2)</td>
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<td></td>
<td>• SMLOF50 – Laser Mask 0.1 mm filtration media (flat mask)</td>
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<tr>
<td>0641-865-01</td>
<td>Filter kit for Buffalo Whisper Turbo Smoke Evacuator</td>
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<tr>
<td></td>
<td>Includes:</td>
</tr>
<tr>
<td></td>
<td>• ViroSafe filter (1)</td>
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<tr>
<td></td>
<td>• Vacuum hose 0.875&quot; x 6&quot; (1)</td>
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<tr>
<td></td>
<td>• Laser resistant wand with protective tips 0.875&quot; x 8&quot; (pk of 3)</td>
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<tr>
<td></td>
<td>• Protective tips for wands (pk of 10)</td>
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#### Auxiliary Devices

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>MD14975000</td>
<td>110 Bacteriological Filter for Laser Arm (x10)</td>
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<tr>
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<td>For air purge line included with Compact, 10S and UltraPulse® SurgiTouch™ laser systems.</td>
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<tr>
<td>ACCE01000</td>
<td>LinePurge external air compressor 115V</td>
</tr>
<tr>
<td>ACCE02000</td>
<td>LinePurge external air compressor 220V</td>
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</table>
At Lumenis, we understand the importance of delivering service and technical support of the highest quality. When you buy a laser or light-based system from Lumenis, you make an investment in the world’s most innovative medical technology in its category, backed by the most comprehensive service and support organization in the industry. Customer satisfaction is paramount and the ultimate goal of our business.