Fotona
choose perfection

60 1964 2024
years of innovation



Ultra-Performance
Photoacoustic Laser System

StarWalker® MaQX Pro

Committed to Engineering
The Highest Performance, Best Made Laser Systems in the World



Power Meets Beauty: Highest Performance & Award-Winning Design

reddot design award

StarWalker® MaQX Pro

Exceptional Beam Quality Across All Frequencies

Unmatched Energy Performance: up to 10 J and 15 Hz

Now with 60% More Toning Power for Extra Speed

Nd:YAG and KTP Spot Sizes up to 12.5 mm at High Frequencies

- Ultra-performance laser system with the **most advanced, compact design** and an exceptionally **small footprint**
- **16 laser modalities across 4 wavelengths** enable pulse durations from nanoseconds to milliseconds, expanding the range of treatments
- MaQX Pro delivers optimal power for high-speed treatments, with a unique **top-hat beam profile** that ensures homogeneous energy distribution at all frequencies, guaranteeing uniform and predictable results
- **Fotona's proprietary ASP (Adaptive Structured Pulse) technology** enables laser pulse shaping tailored to the laser-tissue interaction of each treatment
- The system's **OPTOflex® arm with patented vacuum cell technology** guarantees distortion-free beam delivery
- **Dual-monitor EFC energy control** ensures precise laser output stability
- A **wireless footswitch** offers extra convenience in system control



Two Models, One Standard of Excellence

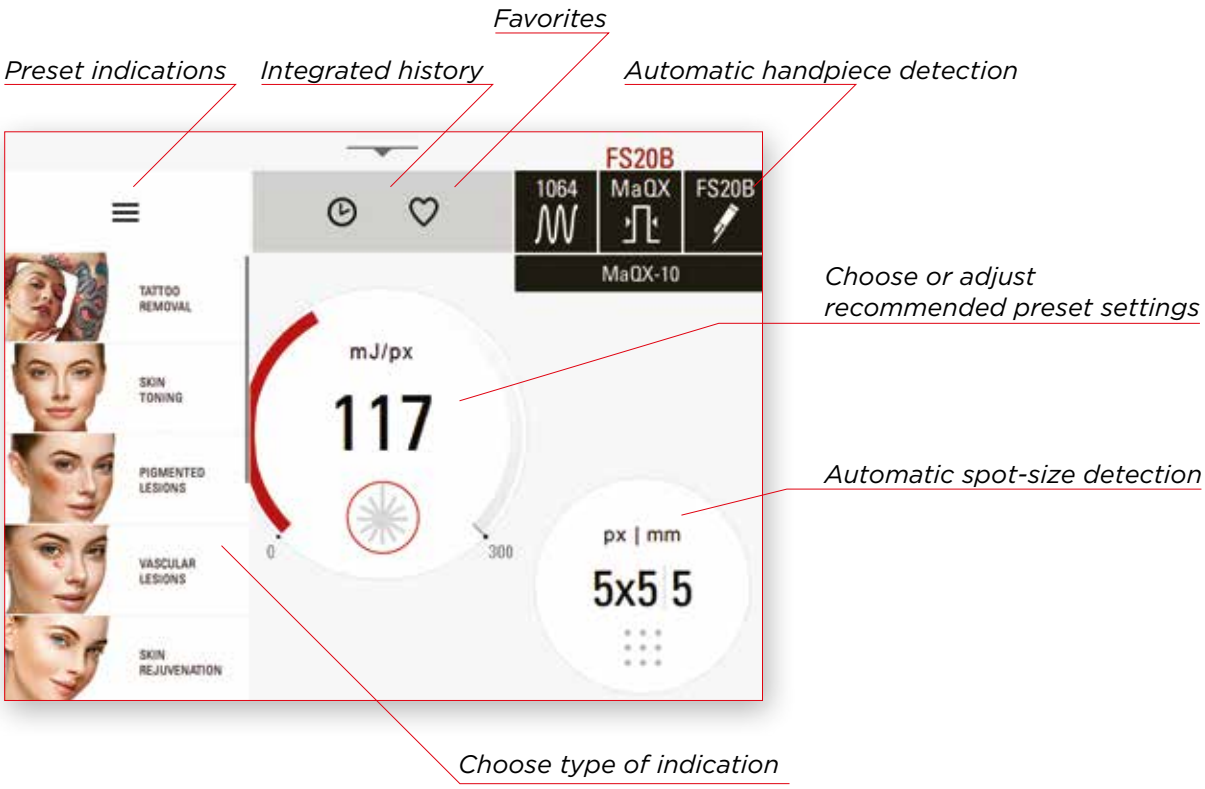
The StarWalker® laser system is available in **two models: StarWalker® MaQX Pro** is the most advanced, highest-performance StarWalker® model, offering an expanded range of treatments for maximum versatility. **StarWalker® QX** is Fotona's standard high-performance Q-Switched laser, designed for core treatments.

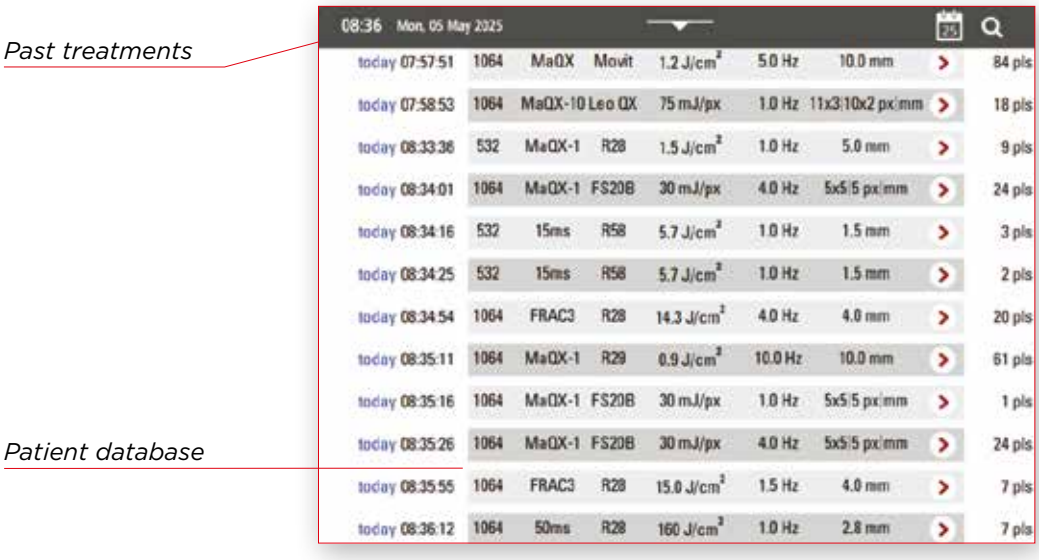
	1064 nm Nd:YAG	532 nm KTP	585 nm dye	650 nm dye
Pigmented lesions, FracTAT® tattoo removal	MaQX-1	MaQX-1	QX	QX
FracRevive® rejuvenation	MaQX-2, **MaQX-5, MaQX-10**	-	-	-
Melasma MaQX Clear®	MaQX-1, FRAC3®, ACC, **VERSA3**	-	-	-
Pigmented lesions	MaQX-1, MaQX-2, **MaQX-5, MaQX-10**	-	-	-
Acne scars	MaQX-1, MaQX-2, **MaQX-5, MaQX-10**	-	-	-
Active acne	**VERSA3,** FRAC3®, ACC	-	-	-
Skin toning	MaQX-1, MaQX-2, **MaQX-5, MaQX-10**	MaQX-1, MaQX-2, **MaQX-5, MaQX-10**	-	-
Photodamaged skin rejuvenation	FRAC3®, ACC	-	-	-
Wrinkles, pores, skin rejuvenation	**VERSA3**, FRAC3®, ACC	-	-	-
Vascular lesions, veins, hemangiomas	**VERSA3**	**VERDE**	-	-
Hair removal	**VERSA3**, FRAC3®, ACC	-	-	-
Warts	**VERSA3**	-	-	-
Onychomycosis	**VERSA3**	-	-	-

**Modalities available exclusively with the MaQX Pro model are highlighted in bold.*

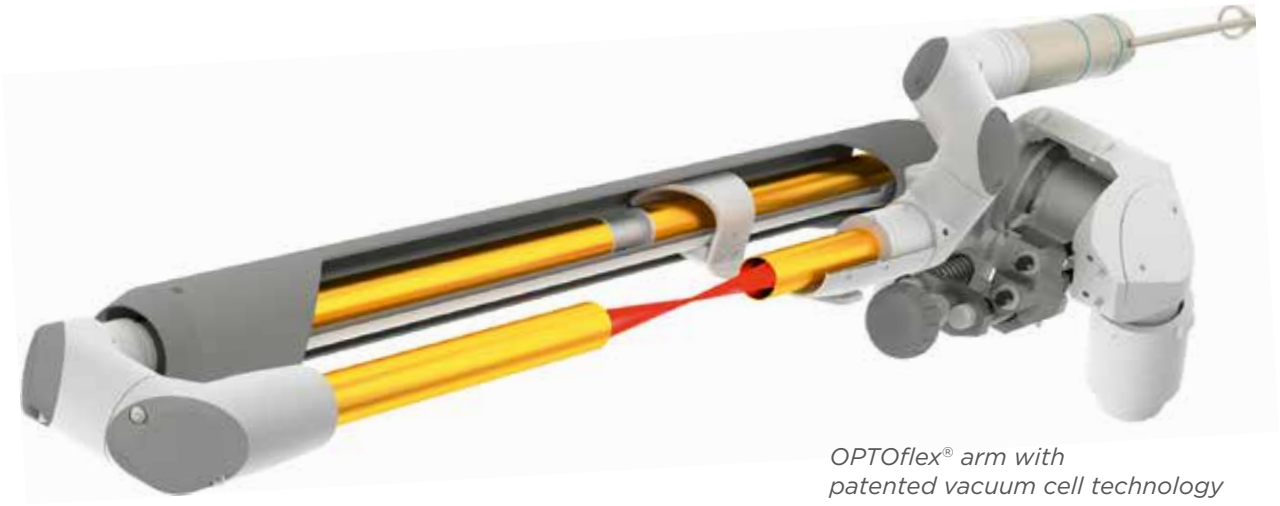
Smart & Intuitive: Technology that Works for You

- Easy-to-use, highly intuitive interface
- Responsive parameter control
- User-friendly application wizards for recommended parameters
- Quick access to integrated treatment history and patient database
- Fully customizable memory storage for preset treatments





Innovation at Work



OPTOflex® arm with patented vacuum cell technology



Patented Solutions for a Homogenous Beam Profile

StarWalker's advanced Q-switched laser technology incorporates groundbreaking solutions such as **patented OPTOflex®** and **Vacuum Cell Technologies** to produce exceptionally homogeneous beam profiles.

Homogeneity of a laser beam is crucial for safety during treatment, as it ensures **even energy distribution across the treated area**. This may reduce the risk of epidermal damage, bleeding, tissue splatter, and transient skin texture changes. Achieving such homogeneity has long been a challenge in the laser industry due to the nonlinear nature of Q-switched lasers, but it is essential for optimal performance.

The OPTOflex® articulated arm is designed to efficiently transmit the laser beam without losing energy or changing the beam's original properties. The shape and magnitude of the **aiming beam** enhance visibility, allowing for faster, more precise treatments. Lightweight, compact, and designed to fold back for reduced system height, OPTOflex® combines convenience with unparalleled performance. With laser quality benefits unlike any other beam delivery system, OPTOflex® has set the standard for high-power medical lasers.

Full-Beam and Fractional Handpieces including LIOB Spacers

StarWalker's full-beam and fractional handpiece technology enables physicians to provide advanced solutions for a broad range of treatments. Fractional handpieces harness the power of the photomechanical effect, channeling high-energy pulses into precise arrays while keeping the surrounding tissue intact.

All fractional handpieces can also be used with **Laser-Induced Optical Breakdown (LIOB) spacers**, which enable even gentler treatments by moving the formation of microdamage islands below the skin surface.



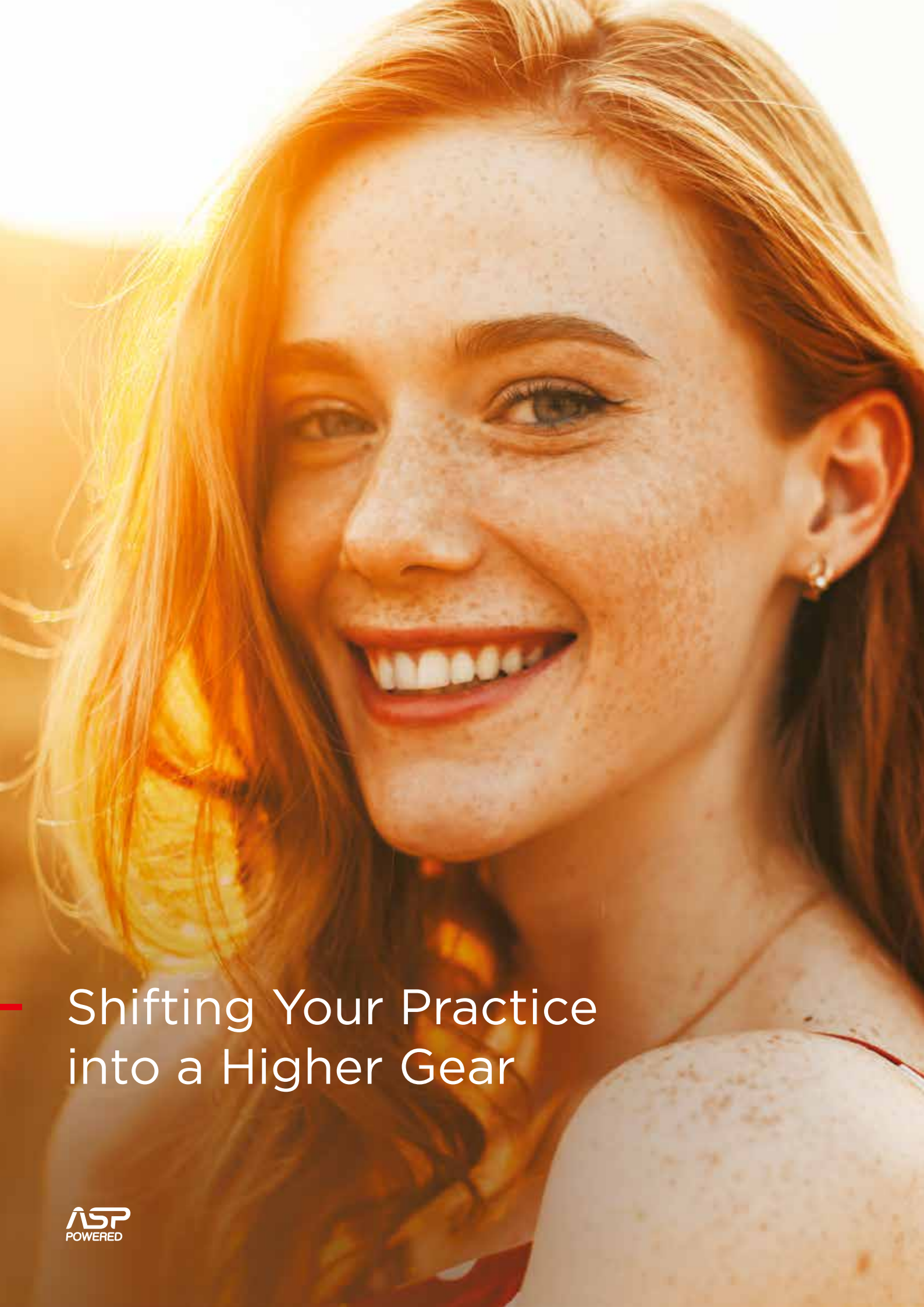
Fractional handpiece FS20A



Full-beam handpiece R29

Energy Feedback Control for Unmatched Safety

Fotona's StarWalker® systems feature advanced Energy Feedback Control (EFC)—an intelligent safety mechanism that continuously monitors and regulates each individual laser pulse in real time. Using a dual-channel feedback loop, EFC ensures that the energy output precisely matches the selected treatment parameters, giving you the peace of mind that every pulse is safely and accurately delivered throughout the entire session. This eliminates energy fluctuations common in less advanced systems and removes the need for manual recalibration.



Shifting Your Practice into a Higher Gear

ASP POWERED



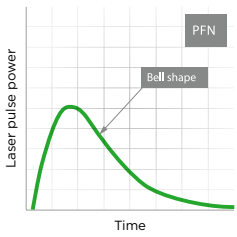
Revolutionary
Adaptive Structured Pulse
Technology

Extra Power for Extra Speed

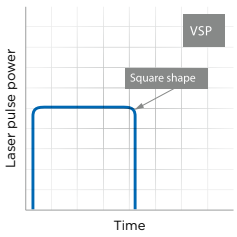
With 60% more power at high frequencies and Nd:YAG and KTP spot sizes up to 12.5 mm, StarWalker® MaQX Pro enables **significantly faster treatments across large surface areas**, reducing procedure times by up to 40%. The combination of high energy output with a top-hat beam profile delivers precise, **uniform energy distribution**, making it the ideal solution for pigmentation, skin rejuvenation, and toning procedures—all while **maximizing your return on investment**.

Third Generation ASP Technology

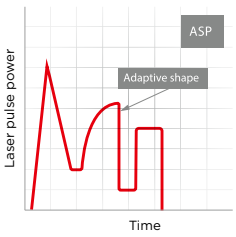
StarWalker® and its groundbreaking ASP (Adaptive Structured Pulse) technology represent a cosmic shift forward for the medical and aesthetic laser industry. This third-generation technology combines the unsurpassed range of pulse duration modes of Fotona's VSP (Variable Square Pulse) technology with the revolutionary capability of ASP technology to adapt the temporal structure of laser pulses to the bio-photonic dynamics of laser-tissue interaction.



Standard PFN Technology



Fotona VSP Technology



Third Generation Fotona ASP Technology

Modulated Acoustics Q-Switched (MaQX) Laser System

Fotona's StarWalker® laser system features the entire range of super-short pulse technologies in a single, high-performance solution. StarWalker's patented MaQX pulse modalities produce powerful bursts of laser energy that photoacoustically break apart skin pigmentations into smaller, more easily eliminated particles.

Fotona Q-Switched Pulse Power

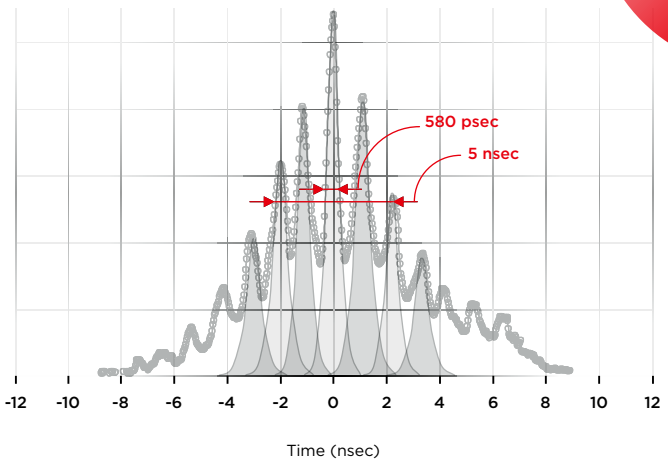
StarWalker's unique TMD (Transverse Mode Discrimination) laser oscillator technology combined with the ASP pulse control delivers very short (5 nsec) Q-switched pulses consisting of a high energy train of ultra-short bursts of energy in trillionths of a second, enabling photomechanical impact to shatter tiny skin targets without injury to the surrounding skin. StarWalker's technology thus combines the high energy capabilities of nanosecond lasers with the ultrashort pulse peak powers of traditional picosecond lasers.



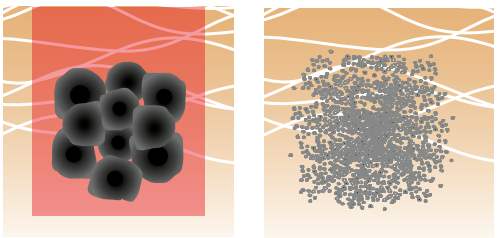
Photon emission energy converter of the StarWalker's TMD (Transverse Mode Discrimination) laser oscillator

Best of Both Worlds

Picosecond pulse power with the high energy of nanosecond pulses



A typical measured local temporal intensity of the StarWalker's 1064 nm MaQX pulse. The 1064 nm MaQX pulse consists of high peak power picosecond micro pulses within an overall nanosecond high energy macropulse.



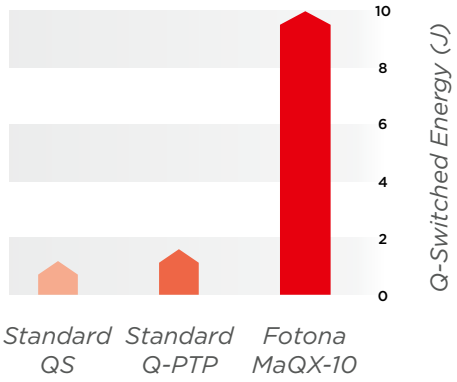
When absorbed in skin pigments, extremely short energy bursts of picosecond structured MaQX pulses generate photoacoustic shockwaves that disintegrate irradiated pigment particles into tiny particles that are then easily eliminated by the body.

Fotona MaQX – Unmatched Q-Switched Pulse Energy

Based on revolutionary ASP technology, StarWalker® is capable of delivering up to an **unprecedented 10 J of Q-switched energy** in one giant structured MaQX pulse.

The unique MaQX high energy capability of StarWalker® enables the generation of a higher energy photoacoustic effect at the treatment site, leading to more effective and faster treatments.

Additionally, with high MaQX energies, larger spotsizes can be used resulting in more homogeneous treatments of even deeper lying skin pigments, and therefore with reduced risk of unwanted side effects.





Up to 12.5 mm spot size with the R29 handpiece

Ultimate Safety with Q-Switched Treatments

Patient safety and comfort with ultra-performance MaQX mode treatments are further enhanced by the StarWalker's unique capability that allows the user to **select the treatment's softness level** (MaQX-1, MaQX-2, MaQX-5 or MaQX-10). When a higher softness level is selected, the StarWalker's ASP technology ensures that the generated acoustic energy is released at an acceptable acoustic power, resulting in a "softer" and less invasive effect on the tissue.

MaQX Technology

Ultra high Q-switched energy for ultimate speed and precision



MaQX mode softness level setting

MaQX mode energy setting

Extended Pulse Range for Extra Versatility

Sixteen Laser Modalities

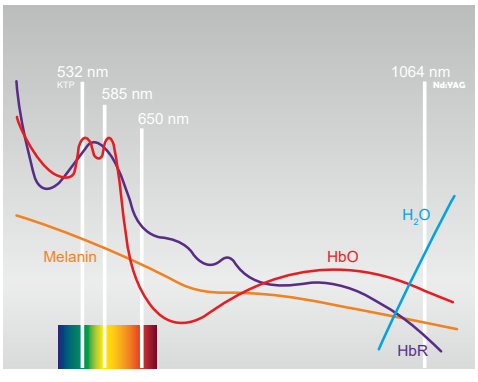
Empowered by Fotona's ASP technology, StarWalker® treatment modes are tailored to the requirements of specific treatments. StarWalker® features an extraordinary 16 laser modalities operating at 4 complementary laser wavelengths. In addition to photoacoustic pulses, the system also enables longer pulse modes, **further expanding treatment versatility** across a wide variety of applications.

These include skin toning and rejuvenation, pigmented lesions removal, tattoo removal, active acne treatments, vascular lesion removal, hair removal, and more—going far beyond the capabilities of traditional Q-switched lasers.

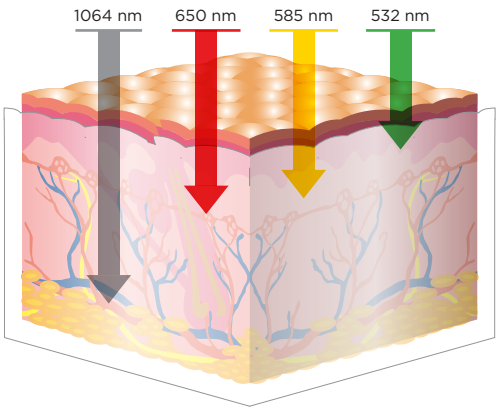
Wavelength	Pulse width		
	nanoseconds	microseconds	milliseconds
1064 nm	MaQX-1, MaQX-2, MaQX-5, MaQX-10, Turbo	FRAC3®, ACC	VERSA3
532 nm	MaQX-1, MaQX-2, MaQX-5, MaQX-10, Turbo	-	VERDE
585 nm	QX	-	-
650 nm	QX	-	-

High-Powered Photoacoustic Pulses in Four Laser Wavelengths

StarWalker® delivers a full range of laser wavelengths to cover the complete absorption spectrum of melanin, oxyhemoglobin, and water, allowing the practitioner to **perfectly adapt each treatment** to the patient's unique skin needs.



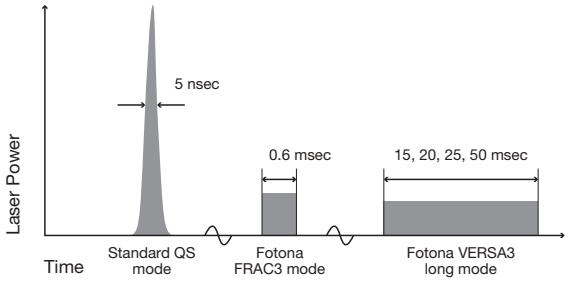
StarWalker's wavelengths are located at appropriate skin absorption peaks and minimums.



Optimal wavelengths for treating structures at different skin depths.

FRAC3® and VERSA3 1064 nm Modes

StarWalker® features the revolutionary **FRAC3®** pulse modality, utilizing the microsecond pulse duration and high peak power density of Fotona's VSP™ Nd:YAG pulse technology to produce a **three-dimensional fractional pattern** in the epidermis and dermis. This creates damage islands that are predominantly located at the sites of targeted skin imperfections. The skin's natural healing response then acts to repair the microdamage, thereby **safely rejuvenating the skin**.

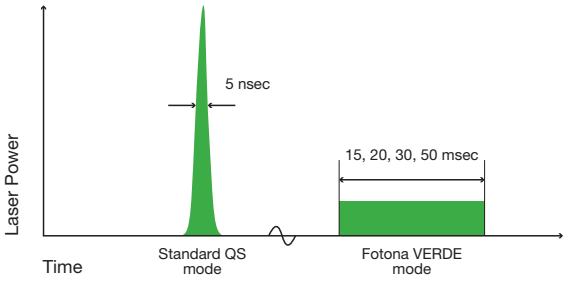


Standard Q-switched laser systems cannot deliver Nd:YAG laser pulses in the 'long-pulse' duration regime.

StarWalker® also delivers longer 1064 nm **VERSA3** pulses with a range of durations (15, 20, 25, and 50 ms), which are clinically well-proven **for a broad range of treatments**, such as active acne, wrinkle reduction, hair removal, and the treatment of warts or onychomycosis. In addition, the StarWalker's ASP technology modulates the pulse to create a micropulse structure superimposed on the long-pulse modes, thus combining the beneficial effects of the "long" 1064 nm pulse with the self-induced fractional capability of the microsecond pulse modalities.

VERDE 532 nm Mode

Powered by advanced ASP technology, StarWalker® features a unique green long-pulse VERDE mode, specifically designed for the **treatment of vascular lesions**. It offers a range of long-pulse durations (15, 20, 30, and 50 ms) to effectively target blood vessels and vascular lesions of different sizes. The 532 nm wavelength aligns with one of the oxyhemoglobin absorption peaks, allowing for the treatment of superficial vascular lesions, while the 1064 nm wavelength can target deeper and larger vessels.



StarWalker's unique VERDE mode delivers 532 nm energy in long millisecond pulses designed for treating superficial vascular lesions.

KTP VERDE also allows for safe and effective **removal of freckles and sun spots** in patients with Fitzpatrick skin type IV, with no long-lasting adverse effects. Full-face application of long-pulsed KTP can result in improved skin texture and tone.

More than a Q-Switched Laser

FracRevive+®
for Enhanced Photoacoustic Rejuvenation

- **Fast & comfortable**
- **Minimally invasive**
- **Minimal downtime**

FracRevive+® enhances the original FracRevive® treatment, which combines full-spot brushing and fractional FracTAT® stamping, by adding a FRAC3® brushing step that **targets deeper skin layers** for advanced rejuvenation. This **3-step approach** effectively reduces pore size, diminishes the appearance of pigmentation spots and wrinkles, enhances skin texture, and unifies tone, delivering even **more visible results faster**.



Courtesy of NuSkinnovation

FracRevive® with Q-Sw Nd:YAG (1064 nm)



Courtesy of NuSkinnovation

FracRevive® with Q-Sw Nd:YAG (1064 nm)

MAQX Clear®
for Multifactorial Treatment of Melasma

- **Visible reduction in melasma**
- **Tighter and more youthful skin**
- **Minimally invasive**
- **Results lasting up to 1 year**

MaQX Clear® is a **4-step approach** designed to effectively treat melasma and related pigmentation disorders. The first step uses Q-switched **Nd:YAG pulses with MaQX-1** to break down melanin at a subcellular level. Next, low-fluence, short **FRAC3® pulses** target erythema and inflammation. In the third step, **FracTAT® technology** stimulates keratinocyte exchange and promotes non-thermal skin rejuvenation. The fourth step is optional and applies the **Nd:YAG VERSA mode** to penetrate deeply into the skin, removing any visible vascular components of melasma.



Courtesy of J. C. Vélez, MD, & S. Vélez, MD

Melasma with Q-Sw Nd:YAG (1064 nm)



Courtesy of J. C. Vélez, MD, & S. Vélez, MD

Melasma with Q-Sw Nd:YAG (1064 nm)

Skin Toning Redefined

Thanks to its advanced technology, StarWalker® Pro can **generate Nd:YAG and KTP spot sizes up to 12.5 mm at high frequencies**, which is ideal for gentle yet efficient skin toning, lightening, and rejuvenation of **large surface areas**—all with significantly shorter treatment sessions. Additionally, a non-ablative toning procedure stimulates collagen production for long-lasting improvement of skin tone and texture.



Courtesy of J. Kozarev, MD

Age spots and toning with Q-Sw Nd:YAG (1064 nm)

Nd:YAG Toning

Ideal for **darker skin types** and **sensitive skin**, Nd:YAG's lower wavelength minimizes hyperpigmentation risk by avoiding excessive absorption by epidermal melanin, allowing it to target deep pigment deposits safely. This ensures precise, low-discomfort treatments with minimal downtime, leaving skin smoother and more even-toned.



Courtesy of I. H. Omari, MD

Toning and rejuvenation after 1 session with Q-Sw & FRAC3® Nd:YAG (1064 nm) modes

Green Toning

Fotona's advanced MaQX technology enables a multi-layered approach to skin toning by combining **Nd:YAG** and **KTP brushing**. The Nd:YAG wavelength effectively targets deeper dermal pigmentation, while KTP brushing addresses superficial pigmentation like sunspots and freckles.

This treatment is primarily intended for individuals with **lighter skin types** who require comprehensive pigmentation treatment at multiple depths. However, it can be adjusted for darker skin tones by modifying KTP energy levels to ensure optimal safety and effectiveness.



Courtesy of A. B. Goodall

Skin toning with Q-Sw Nd:YAG (1064 nm) & Q-Sw KTP (532 nm) modes

Other Dermal and Epidermal Pigmented Lesions

Courtesy of J. C. Vélez, MD, & S. Vélez, MD



Seborrheic keratosis with KTP (532 nm) VERDE mode

Courtesy of K. W. Book



Removal of freckles with Q-Sw Nd:YAG (1064 nm)

Courtesy of S. Saracoglu, MD



Nevus of Ota with Q-Sw Nd:YAG (1064 nm)

Courtesy of J. C. Vélez, MD, & S. Vélez, MD



Removal of freckles with Q-Sw KTP (532 nm), Q-Sw Nd:YAG (1064 nm) & FRAC3® modes

Courtesy of H. Yurteri, MD



Café au lait spots with Q-Sw KTP (532 nm) & Q-Sw Nd:YAG (1064 nm) modes

Courtesy of Wong Yeut Sun, MD



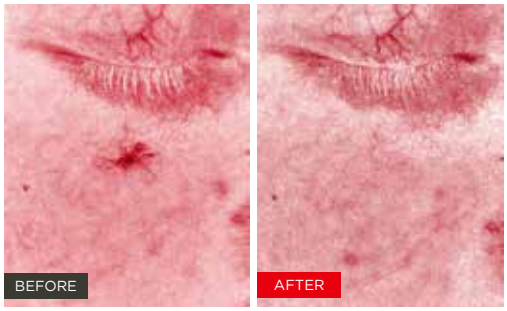
PIH with Q-Sw & ACC Nd:YAG (1064 nm) modes

Vascular Lesions



Courtesy of U. Ahčan, MD

Treatment of port-wine stain with KTP (532 nm) VERDE mode



Courtesy of Fotona

Spider vein removal with Q-Sw Nd:YAG (1064 nm)

Acne Treatments



Courtesy of Chua Cheng Yu, MD

Active acne treatment with VERSA3 & MaQX-1 Nd:YAG (1064 nm) modes

Facial Redness



Courtesy of D. Kaliterna

Fractional treatment of facial redness with Q-Sw Nd:YAG (1064 nm)

Hair Removal



Courtesy of DMT

Hair removal with VERSA3 Nd:YAG (1064 nm) mode

Facial Pores



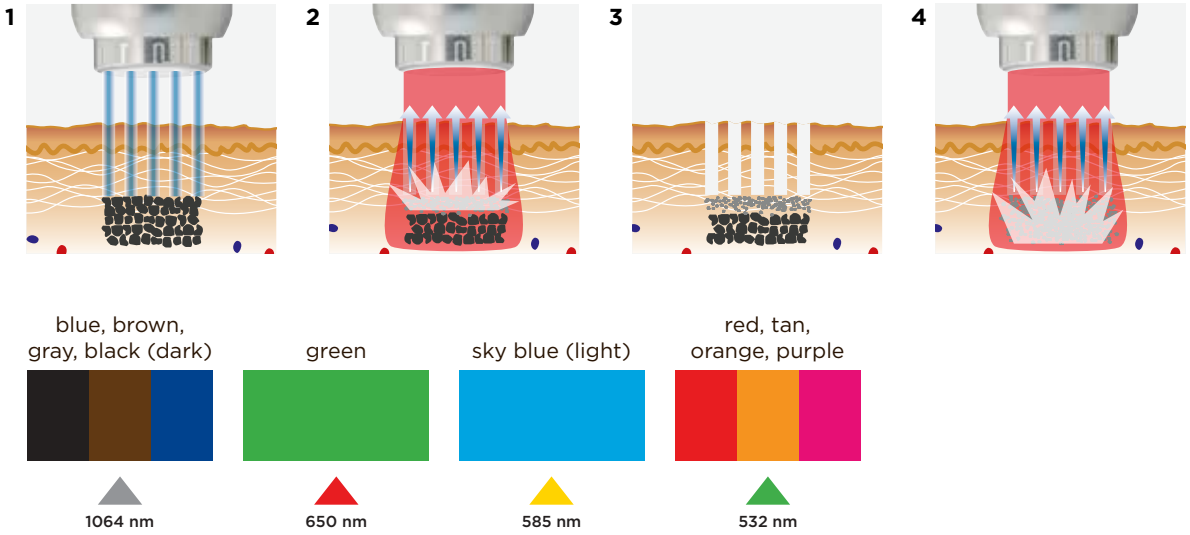
Courtesy of Fotona

Treatment of pores with Q-Sw Nd:YAG (1064 nm)

Patented FracTAT® Tattoo Removal

- **Enhanced generation of photoacoustic shockwaves**
- **Fractional pretreatments for improved healing and sustained skin quality**
- **Shorter treatment time**
- **Fewer treatments needed**

In the **Fotona FracTAT® tattoo removal procedure**, microholes are drilled with a fractional laser handpiece **(1)**, followed by treatment with a full-beam handpiece **(2)**. Microholes reduce the frosting effect and pressure on the surrounding tissue and act as pressure relief ducts **(3)**, allowing gases formed in the tattoo removal process to escape. This enables deeper pigments to be reached **(4)**, leading to more efficient pigment destruction.





Courtesy of L. Marini, MD

Tattoo removal with Q-Sw Nd:YAG (1064 nm)



Courtesy of U. Ahčan, MD

Color tattoo removal with Q-Sw Nd:YAG (1064 nm)


StarWalker MaQX Pro
Fotona
R29
1064
MaQX
R29
MaQX-1
J/cm²
1.3
Hz
10.0
mm
12.5
MaQX Pro

Excellence in Your Hands

Discover StarWalker's complete line of advanced, easy-to-use handpieces, featuring a **compact design** with a **quick-release** mechanism for fast exchange. Equipped with an intelligent **automatic detection** system, they instantly recognize the handpiece type and spot size. Thanks to the innovative FracTAT® technology, these handpieces support a wide range of ablative and non-ablative fractional treatments, offering multiple wavelengths and matrix patterns for customized procedures.



Full-beam and **fractional beam titanium** handpieces

Handpiece	Wavelength	Spot size	Spot shape		Ideal for
R28	1064 nm, 532 nm	2 - 8 mm	circle		an all-rounder
R29	1064 nm, 532 nm	2, 2H, 3, 10, 12.5, 20 mm	circle		skin toning and small lesions
R58	532 nm	1.5 - 6 mm	circle		VERDE
FS20A	1064 nm	9 x 9 mm	fractional, 81 pixels		FracTAT® tattoo removal, FracRevive® rejuvenation
FS20B	1064 nm	5 x 5 mm	fractional, 25 pixels		FracTAT® tattoo removal, scars, acne scars
FS50	532 nm	9 x 9 mm	fractional, 25 pixels		diffused pigmentation
FS50B	532 nm	5 x 5 mm	fractional, 25 pixels		diffused pigmentation
Leo QX	1064 nm	2 x 10 mm	fractional, 3 x 11 pixels		FracTAT® tattoo removal, scars
RedLase QX	650 nm	2, 3, 5 mm	circle		green tattoos
YellowLase QX	585 nm	2, 3, 5 mm	circle		sky-blue tattoos
Movit QX	1064 nm	15 x 15 mm	fractional, 13 x 13 pixels		skin toning
	532 nm	12 x 12 mm	fractional, 21 x 21 pixels		skin toning
	1064 nm, 532 nm	10 x 10 mm	square		skin toning

Innovative Handpieces for Customized Treatments

Leo QX

With a **unique rectangular pattern**, the Leo QX fractional handpiece maximizes the efficiency of FracTAT® tattoo removal, particularly for line-shaped tattoos and permanent makeup.





"The Leo QX fractional handpiece is a must-have when dealing with complex, resistant and fading tattoos."

Prof. Leonardo Marini

RedLase QX & YellowLase QX





Courtesy of T. Osterc Diwersy, MD

Sky-blue ink removal with StarWalker® PICO Pro and YellowLase handpiece (585 nm)

Engineered for optimal performance, these next-generation full-beam handpieces harness **dye laser technology** to deliver even greater precision and effectiveness in **multicolor tattoo removal** and other skin treatments. RedLase QX is optimized for green tattoos, while YellowLase QX targets sky-blue pigments—providing a level of accuracy and efficiency beyond standard laser technology.

World Class Support

LA&HA SYMPOSIUMS

- Global & Regional

ON-LINE SUPPORT

- My Fotona
- Fotona App
- Fotona User Group

TRAININGS

- Led by leading international laser experts
- Live demos and hands-on
- Explore all areas of medical lasers
- Great experience-sharing opportunity







THE LASER AND HEALTH ACADEMY (LA&HA) IS FOTONA'S PARTNER IN EDUCATION & CLINICAL RESEARCH ON MEDICAL LASER APPLICATIONS.

Laser&Health ACADEMY®

www.laserandhealth.com

THE LASER AND HEALTH ACADEMY

The Laser and Health Academy (LA&HA®) is a not-for-profit organization dedicated to the promotion of research, education and publishing in the field of laser medicine.

RESEARCH: LA&HA® collaborates with industry, medical professionals and universities on projects aimed at the development and improvement of laser applications.

EDUCATION: LA&HA® serves as a platform for continuous education, with a focus on practical instruction and the demonstration of laser techniques and procedures, delivered through a variety of workshops and seminars by experienced lecturers.

For registration and more details on workshops & training visit: www.fotona.com/en/workshops

The Ultimate Tattoo Removal Powerhouse

reddot design award



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Fotona
choose perfection

Committed to Engineering

THE HIGHEST PERFORMANCE, BEST MADE LASER SYSTEMS IN THE WORLD

since 1964



Fotona, d. o. o.
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1000 Ljubljana
Slovenia
EU

Fotona, LLC
4343 W Royal Lane #116
Irving, TX 75063
USA

Fotona Beauty Light, (Suzhou) Medical Devices Co, Ltd.
No 2, Zengfu Road, Guli Town
Changshu City, Jiangsu Province
CHINA, 215515

Fotona France SARL
47 Boulevard de Courcelles
75008 Paris
France
EU

Fotona GmbH
Hohlbachweg 2
73344 Gruibingen
Germany
EU

Fotona Japan, Ltd.
Tokyo
Japan

Fotona España, S.L.
Avenida Diagonal 353
08037 Barcelona
Spain
EU

www.fotona.com

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