

Taking care of people, our masterpieces

# Q-Plus EVO

Q-Switched Laser Platform Tailored to Your Needs



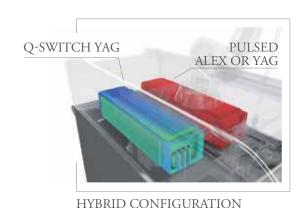


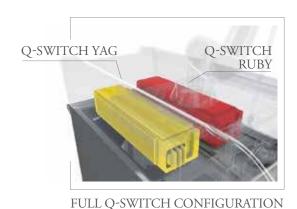
# Q-SWITCHED LASER PLATFORM TAILORED TO YOUR NEEDS

Q-Plus EVO is based on a powerful Q-Switched laser technology that ensures a great versatility in clinical applications. Q-Plus EVO includes different Q-Switched lasers which interact photo-acoustically with the tissues, IPL and Pulsed Lasers that act in a Photo-Thermal way. These exclusive combinations make this system unique and capable of treating multi-color tattoos and benign pigmented lesions without using the unefficient and consumables dye handpieces really common in other systems. It is also used for permanent hair reduction, vascular lesion removal and treatments of aged pigmented skin.

#### THE Q-SWITCHED MODE

In Q-Switched mode, very short pulses (6ns) deliver very high peak power (hundreds of Mega Watts) enabling a highly efficient photo-acoustic effect and drastically reducing thermal interaction with tissue. As a result, the unwanted tattoos and natural pigments of the skin are fragmented in small particles that are removed through the process of phagocitosys.





#### **Q-SWITCHED WITH PULSED LASERS**

The pulsed additional modules effectively perform permanent hair reduction, vascular lesions removal and treatment of aged and pigmented skin. These modules are composed of Nd:YAG (1064/532 nm and optionally @1320 nm)/Alexandrite (755 nm).

The effects are based on the selective thermal damage of the skin targets such as melanin, blood and water.

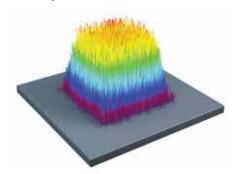
The laser handpiece of the Pulsed modules can be integrated with either contact or air based skin cooling devices, allowing safe and comfortable treatments.



#### FLAT TOP OPTIBEAM II TECHNOLOGY

The laser beam profile must be as much homogeneous as possible, otherwise longer healing time and side effects can occur. The extremely high laser peak power of these devices (more than 160 MW) is delivered on the skin without any "hot points" in the spot size.

OPTIBEAM II® handpieces assure a flat top beam profile due to its advanced optical technology, able to distribute the laser power homogeneously all over the spot size. The OPTIBEAM II® has squared, rounded and fractionated beam profiles. These handpieces are all not convergent to maximize the delivery of energy in deep skin and to be used in safety also if the handpiece is not in perfect contact with the skin.



#### **EVO CONFIGURATIONS**

Scars treatment - Inflammatory acne

Q-PLUS A	Q-SWITCHED and PHOTO-THERMAL Nd:YAG 1064/532 nm				
Benign pigmented lesion Dermatological foot con	n removal - Tattoo removal - Lightening of unwanted hai aditions (skin and nails)	rs - Skin rejuvenation			
Q-PLUS C	Q-SWITCHED and PHOTO-THERMAL	Nd:YAG 1064/532 nm			
	Q-SWITCHED and PHOTO-THERMAL	RUBY 694 nm			
	ttoo colors - Benign pigmented lesion removal - Lighteni matological foot conditions (skin and nails) - Permanent				
Q-PLUS R	Q-SWITCHED and PHOTO-THERMAL	RUBY 694 nm			
Tattoo removal - Benign	n pigmented lesion removal - Permanent hair reduction*				
Q-PLUS STAR 1	Q-SWITCHED	Nd:YAG 1064/532 nm			
	PULSED	Nd:YAG 1064/1320 nm (Optiona			
Permanent hair reduction	n removal - Tattoo removal - Lightening of unwanted hairs n* - Dermatological foot conditions (skin and nails) - Derr matory acne				
	n* - Dermatological foot conditions (skin and nails) - Derr				
Permanent hair reduction Scars treatment - Inflami	n* - Dermatological foot conditions (skin and nails) - Derr matory acne	natological vascular lesions			
Permanent hair reduction Scars treatment - Inflamm  Q-PLUS STAR 2  Benign pigmented lesion	n* - Dermatological foot conditions (skin and nails) - Derr matory acne  Q-SWITCHED and PHOTO-THERMAL	Nd:YAG 1064/532 nm  ALEXANDRITE 755 nm  Lightening of unwanted hairs			
Permanent hair reduction Scars treatment - Inflamm  Q-PLUS STAR 2  Benign pigmented lesion	n* - Dermatological foot conditions (skin and nails) - Derrmatory acne  Q-SWITCHED and PHOTO-THERMAL  PULSED  n removal - Tattoo removal - Permanent hair reduction* -	Nd:YAG 1064/532 nm  ALEXANDRITE 755 nm  Lightening of unwanted hairs			

<sup>\*</sup> Permanent hair reduction is defined as the long-term stable reduction in the number of hairs regrowing when measured at 6, 9, and 12 months after the completion of a treatment regimen.

## RESULTS BEFORE / AFTER



TATTOO REMOVAL Courtesy Second Skin-Laser Tattoo Removal



TATTOO REMOVAL Courtesy Second Skin-Laser Tattoo Removal



TATTOO REMOVAL Courtesy Second Skin-Laser Tattoo Removal



TATTOO REMOVAL Courtesy Second Skin-Laser Tattoo Removal



LENTIGO Courtesy Paolo Sbano MD





MELASMA
Courtesy Cheng Jumping MD

### OPTIONAL ACCESSORIES



#### TWAIN CONNECTOR

Q-Plus EVO, through the special Twain universal connector, can be equipped with Twain 2940 and Twain IPL handpieces.

#### Nd:YAG 1320

Optional for Q-Plus Star 1. It is a Nd:YAG @ 1320 nm, very effective for non-ablative skin rejuvenation and for scars treatments.

#### **TWAIN 2940**

Twain 2940 is a laser handpiece that fits to the Twain universal connector present on the Quanta System laser platforms. It has been designed to perform ablation procedures, both fractional and homogeneous. The Er:YAG laser @ 2940 nm is able, through the variation of pulse parameters, to remove the layers of skin with minimal thermal damage or produce a higher coagulation suitable for the stimulation of collagen production.



FRACTIONAL skin resurfacing traumatic and acne scars epidermal dyschromia sun and age spots

HOMOGENOUS skin ablation full skin resurfacing

#### TWAIN IPL

Q-Plus EVO can be equipped with Twain IPL handpieces. The contact skin cooling and the 6 range of wavelengths available, expand flexibility and versatility in the treatments.

permanent hair reduction benign pigmented lesions skin rejuvenation procedures dermatological vascular treatments active acne



#### **Integrated Contact SKIN COOLER**

The skin cooler is fully integrated into the system. In all treatment performed with pulsed lasers (Q-Plus Star 1, 2 and Ultralight) it ensures an effective thermal protection and increases the treatment comfort.



#### **SKINCRYO**

It is an adapter that integrates the optics of pulsed laser (Q-Plus Star 1, 2 and Ultralight) with Zimmer air cooling.

This handpiece ensures the best pain reduction when treating large areas.



#### TECHNICAL SPECIFICATIONS

Laser		Q-Switched Nd:YAG	Q-Switched FD Nd:YAG	Q-Switched Ruby	
Wavelength (nm)		1064	532	694	
Pulse width		6ns in single pulse; 6ns + 6ns in OP mode (double pulse); 300μs in PT mode (Photo-Thermal)	6ns in single pulse; 6ns + 6ns in OP mode (double pulse)	30ns; 2 ms in PT mode (Photo-Thermal)	
Beam delivery		articulated arm with detachable handpiece	articulated arm with detachable handpiece	articulated arm with detachable handpiece	
Available handpieces (optional) (mm)		3, 4.5, 6, 7.5, 9, 10.5 mm round; 2x2, 3x3, 4x4, 5x5 square; fractional round 8 mm	3, 4.5, 6, 7.5, 9, 10.5 mm round; 2x2, 3x3, 4x4, 5x5 square; fractional round 8 mm	3, 4.5, 6, 7.5, 9, 10.5 mm round; 2x2, 3x3, 4x4, 5x5 square; fractional round 8 mm	
Max fluence (J.	/cm <sup>2</sup> )	25; 37.5 (OP); 50 (PT)	12.5; 15 (OP)	30; 50	
Repetition rate	(Hz)	up to 10	up to 10	up to 3	

Laser		Pulsed Nd:YAG	Pulsed FD Nd:YAG	Pulsed Alexandrite	
Wavelength	(nm)	1064	532	755	
Pulse width	(ms)	0.3 - 300	2 - 50	0.3 - 300	
Beam delivery	n delivery Optical fiber with detachable handpiece				
Available spot size	(mm)	2-5, 6, 8, 10, 12, 14, 16	2-5, 6	6, 8, 10, 12, 14, 16	
Max fluence	nce (J/cm²) 500 (software limited)		95	123	
Repetition rate	te (Hz) single; up to 10		single; up to 10	single; up to 10	
Skin Cooling system integrated skin cooler (optional) or air cooling handpiece adaptor (optional)			adaptor (optional)		

Electrical requirements	3.7 kVA, 200-240 Vac; 50/60 Hz
Dimensions and weight	530(W) x 1043 (D) x 1060 (H) mm <sup>3</sup> ; 150 Kg

OPTION		Twain 2940	Twain IPL				Nd:YAG 1320 (1)		
Source		Er:YAG	IPL handpieces				Nd:YAG		
Wavelength	(nm)	2940	650-1200	625-1200	590-1200	570-1200	550-1200	400-1200	1320
Pulse width	(ms)	0.3 - 1		5 - 40 (pulses train duration up to 240 ms)					5 - 10
Spot size	(mm)	2, 4, 9, fractionated	48x13 mm² - 25x13 mm²				up to 12		
Max fluence	(J/cm <sup>2</sup> )	up to 10	up to 25				up to 35		
Repetition rate	(Hz)	up to 6	0,5	0,5	0,5	0,5	0,5	0,5	up to 5

 $<sup>^{\</sup>mbox{\tiny (1)}}$  Nd:YAG 1320 option available for New Q-Plus Star 1

#### **VISIBLE AND INVISIBLE LASER RADIATION**

Avoid eye skin exposure to direct or scattered radiation Laser product: Class 4 Aiming beam: Class 3R



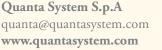




Note: National local authorities may put restrictions to the parameters indicated in the above table, or may limit or remove certain intended uses. Specifications are subject to change without notice.

Quanta System products are manufactured according to the International standards and have been cleared by the most important International notified bodies. The Company is EN ISO 9001:2008 and EN ISO 13485:2012 certified. Quanta System S.p.A. was founded in 1985 and belongs to the EI. En. Group (a public company listed in the Star segment of the Italian Stock Exchange) since January 2004. The company, divided into three business units (medical, scientific and industrial) is specialized in manufacturing of laser and opto-electronic devices.







<sup>(2)</sup> Round handpieces are available on request (3) With square shaped handpieces