PICOSECOND & NANOSECOND LASERS

Two configurations. One product family.

Q4781

TRUE PICOSECOND

350–500 ps
500 mJ

Q4780

NANOSECOND

5–6 ns 1200 mJ



Models & prices

Picosecond vs nanosecond: the pulse width is the key difference

	Q4781	Q4780
	US$15,600	US$7,000

SPECIFICATION	TRUE PICOSECOND	NANOSECOND
Pulse width	350–500 ps	5–6 ns
Pulse energy	500 mJ	1200 mJ
Laser channel	1	1
Laser rods	OD 7 + OD 8 mm	OD 7 + OD 8 mm
Pump lamp	1	1

Optional dye laser handpieces

Q4790 585 nm: US$800 **Q4791 650 nm: US$800**

Picosecond Nd:YAG laser

Q4781

US$15,600



PARAMETER	SPECIFICATION
Pulse width	**350–500 ps**
Pulse energy	500 mJ
Laser channel	1
Pump lamp / rods	1 lamp / 2 rods
Rod diameter	OD 7 mm + OD 8 mm



Laser module

Supplier specifications. Cabinet rendering with original laser-module photograph.

Q-switched nanosecond laser

Q4780

US$7,000



PARAMETER	SPECIFICATION
Pulse width	**5–6 ns**
Pulse energy	1200 mJ
Laser channel	1
Pump lamp / rods	1 lamp / 2 rods
Rod diameter	OD 7 mm + OD 8 mm



Laser module

Supplier specifications. Cabinet rendering with original laser-module photograph.

Pulse width & energy

Why the picosecond model costs more

SPECIFICATION	Q4781 PICOSECOND	Q4780 NANOSECOND
Pulse duration	**350–500 ps**	**5–6 ns**
Same unit: ns	0.35–0.50 ns	5–6 ns
Pulse energy	500 mJ	1200 mJ
Estimated pulse power*	1.00–1.43 GW	0.20–0.24 GW

10–17× shorter pulse duration

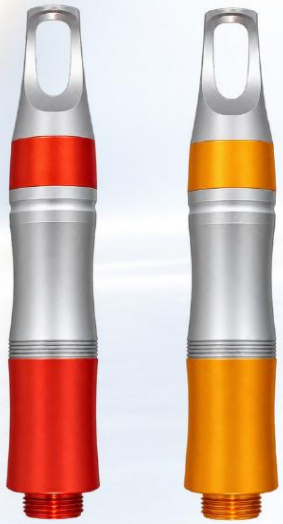
The picosecond model delivers its energy in a much shorter pulse. Its lower pulse energy therefore does not mean lower instantaneous power.

Producing and maintaining these ultrashort pulses requires more demanding laser engineering, contributing to the higher price.

*Pulse energy ÷ pulse duration, assuming both specifications are achieved together.
Actual peak power depends on pulse shape. Values are based on supplier specifications.

Optional dye laser handpieces

532 nm input. Compatible with both quoted models.



650 nm 585 nm

Q4790 585 nm

US$800

Blue tattoo removal and treatment of vascular lesions.

Conversion efficiency: 60%–70%

Q4791 650 nm

US$800

Green tattoo removal and treatment of epidermal pigmentation.

Conversion efficiency: 40%–50%

Prices per handpiece. Optional accessories, quoted separately.
Applications and compatibility follow supplier information. Product rendering shown.