



Full Laser Parts in Nd:YAG Lasers

For lamp-pumped Nd:YAG lasers and diode-pumped Nd:YAG lasers

Based on our years experience on lasers, we can provide the OEM laser makers with all laser parts in the diode- or lamp-pumped Nd:YAG laser parts. We also supply you with all mechanical parts in the laser heads. The laser base, carrier and cover are made of aluminum via injection mold. They are precise, reliable and repeatable.

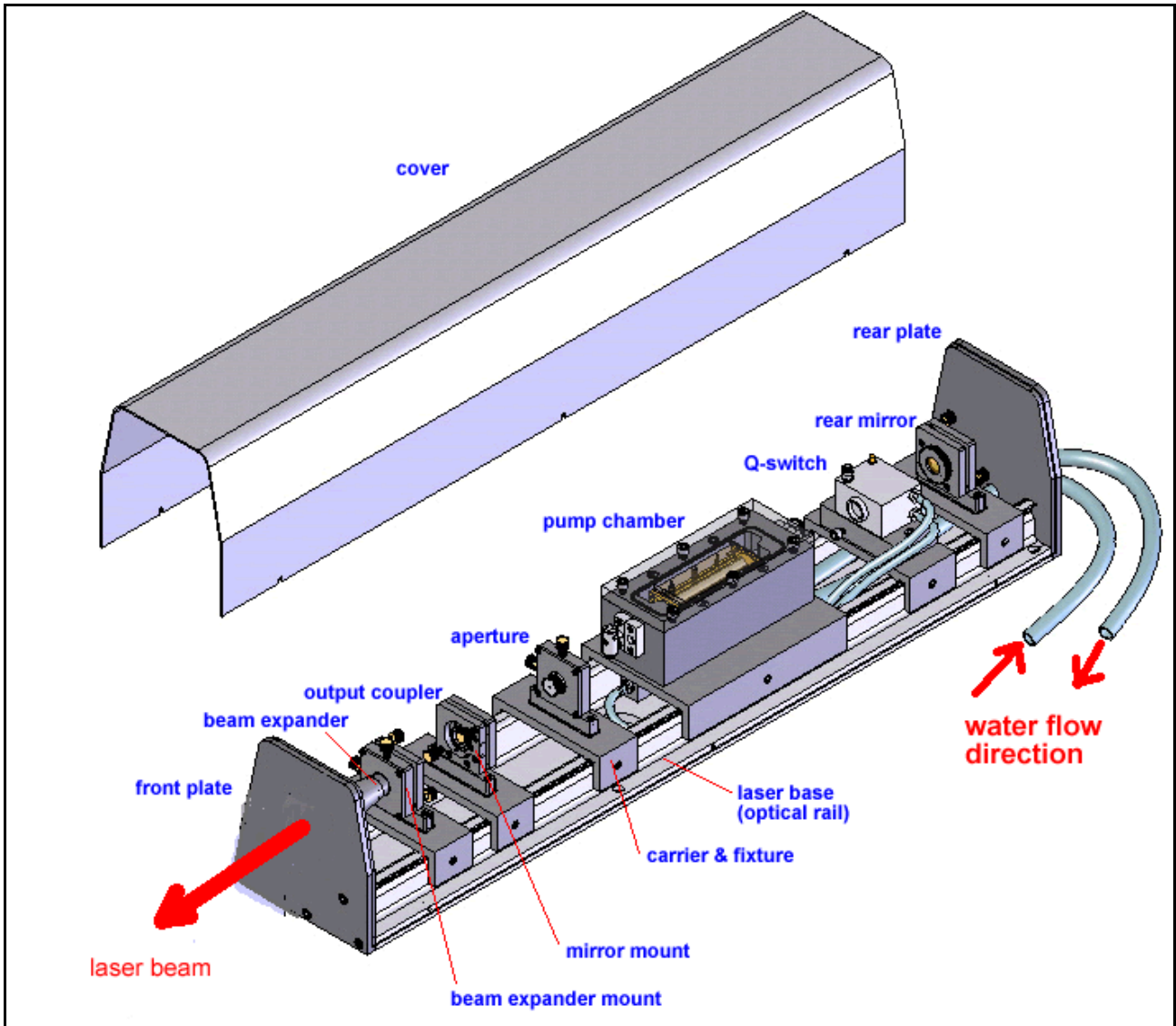
1. Full Parts for Lamp-pumped Nd:YAG Lasers

Including laser head, CW or pulsed lamp driver (power supply), chiller and Q-switch driver.

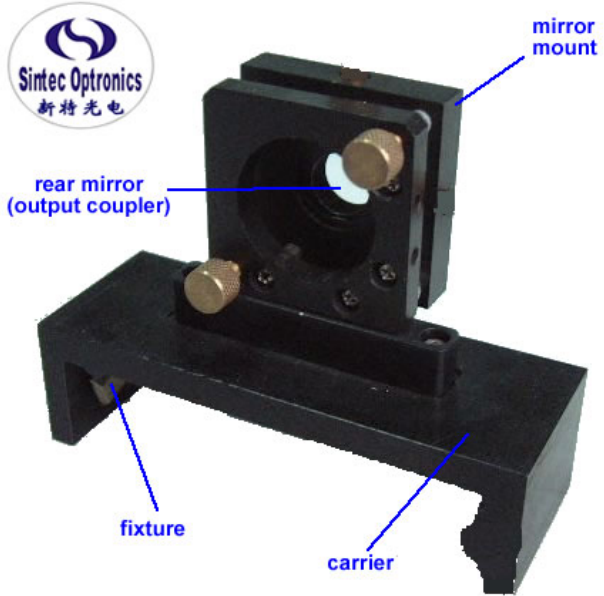
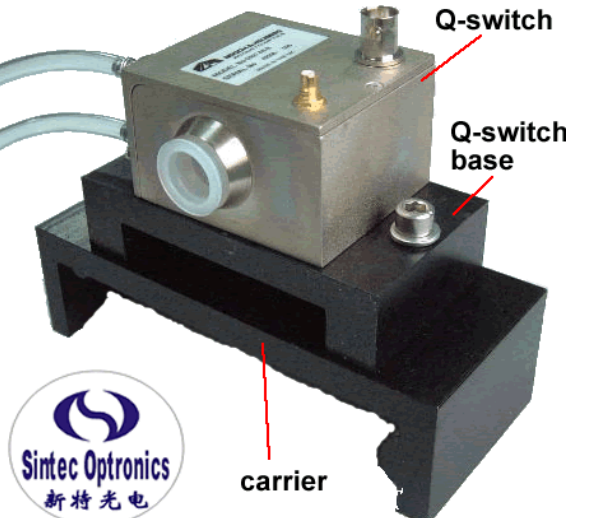
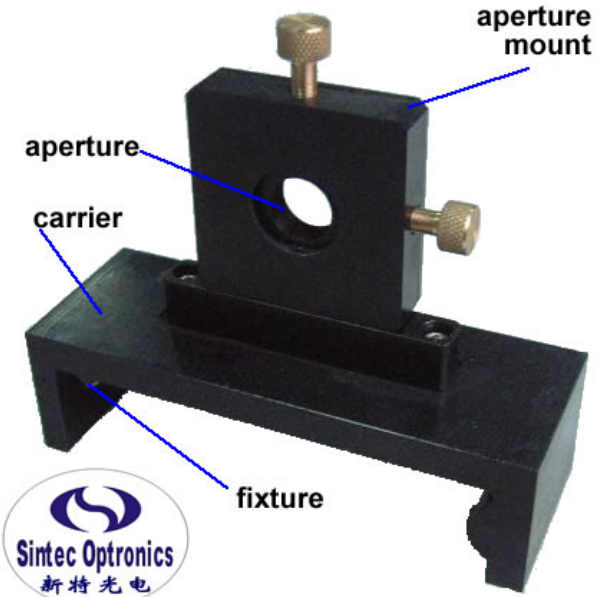


(1) Laser Head

Including pump chamber including YAG rod and lamp, resonator optics including output coupler and reflective mirror (or called rear mirror), Q-switch, aperture, beam expander and mechanical parts including laser base (or called optical rail), carrier, cover, vertical front plate and vertical rear plate.



<p>The detailed view of the pump chamber module includes the following labels:</p> <ul style="list-style-type: none"> Sintec Optronics logo (新特光电) lamp YAG rod pump chamber carrier fixture 	<p>Pump chamber module</p> <ul style="list-style-type: none"> ● pump chamber (gold-coated reflector or ceramic reflector) ● laser lamp (Kr or Xe) ● YAG rod ● carrier & fixture
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 <p>The diagram shows a black metal assembly. A circular rear mirror is mounted on a vertical mirror mount. The mirror mount is attached to a carrier, which is fixed to a base fixture. Labels with blue lines point to the 'mirror mount', 'rear mirror (output coupler)', 'carrier', and 'fixture'. The Sintec Optronics logo is in the top left corner.</p>	<p>Resonator modules including output mirror module and rear mirror module</p> <ul style="list-style-type: none"> ● output coupler (or rear mirror) ● mirror mount ● carrier & fixture <p>Remark: prepared for default mirror dimension of D20x5mm. Other available upon request.</p>
 <p>The diagram shows a silver metal Q-switch mounted on a black metal carrier. The carrier is fixed to a base fixture. Labels with red lines point to the 'Q-switch', 'Q-switch base', and 'carrier'. The Sintec Optronics logo is in the bottom left corner.</p>	<p>Q-switch module</p> <ul style="list-style-type: none"> ● Q-switch ● Q-switch base ● Carrier & fixture
 <p>The diagram shows a black metal aperture mounted on a vertical aperture mount. The aperture mount is attached to a carrier, which is fixed to a base fixture. Labels with blue lines point to the 'aperture mount', 'aperture', 'carrier', and 'fixture'. The Sintec Optronics logo is in the bottom left corner.</p>	<p>Aperture module</p> <ul style="list-style-type: none"> ● Aperture ● aperture mount ● carrier & fixture <p>Remark: default aperture diameter is 1.5mm. Others available upon request.</p>

	<p>Beam expander module</p> <ul style="list-style-type: none"> ● Beam expander ● beam expander mount ● carrier & fixture
	<p>Mechanical parts</p> <ul style="list-style-type: none"> ● carrier & fixture
	<p>Mechanical parts</p> <ul style="list-style-type: none"> ● cover <p>Remark: default cover length is 902mm.</p>
	<p>Mechanical parts</p> <ul style="list-style-type: none"> ● laser base ● vertical front plate ● vertical rear plate <p>Remark: default base length is 892mm.</p>

(2) lamp driver

CW or pulsed lamp drivers (power supply), dual-lamp drivers



CW lamp driver

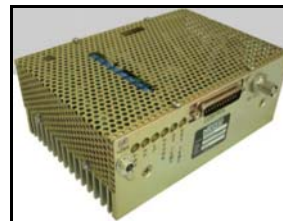


Pulsed lamp driver

(3) Q-switch driver



19" panel QSD series drivers



R390 series drivers

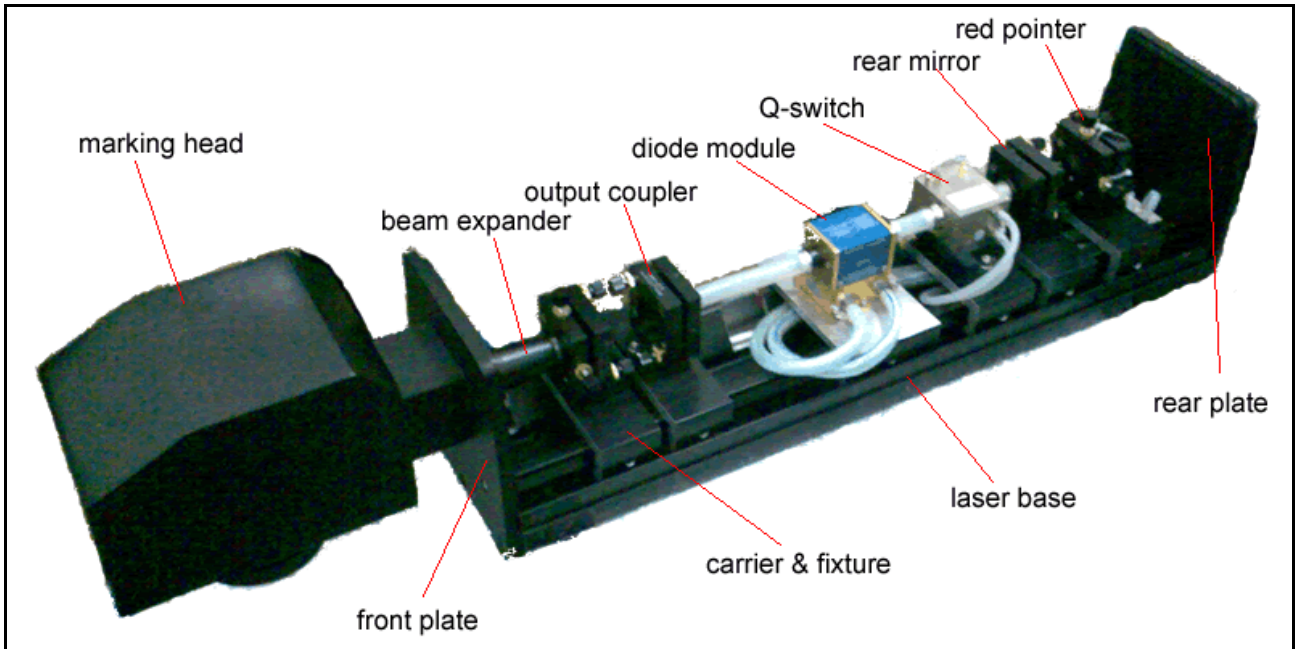
2. Full Parts for Diode-pumped Nd:YAG Lasers

Including laser head (diode pump module, laser resonator, Q-switch cell), Q-switch driver, diode driver and chiller.

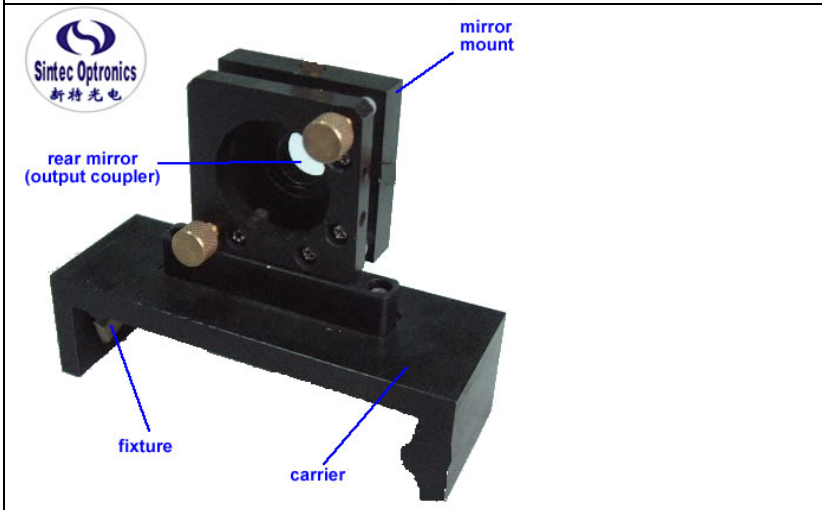


(1) Laser Head

A laser head consists of laser base, diode pump module, output coupler and rear mirror, front plate, rear plate, and cover. Options include aperture, AO Q-switch cell, red pointer and beam expander.

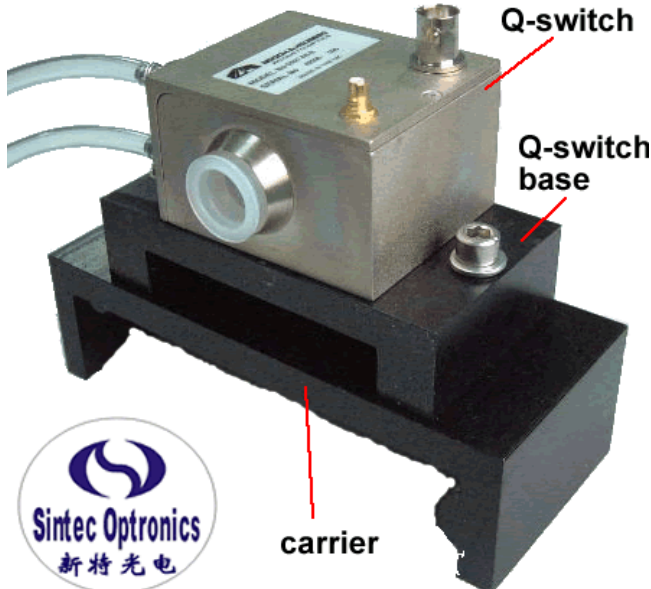
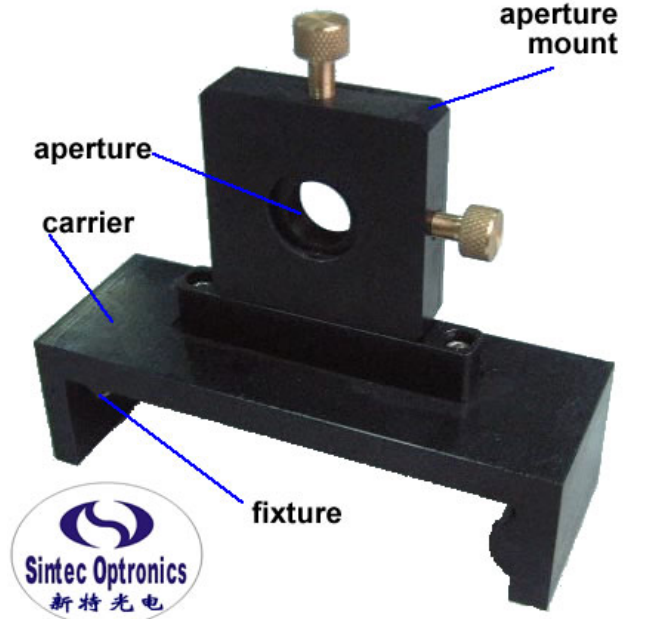
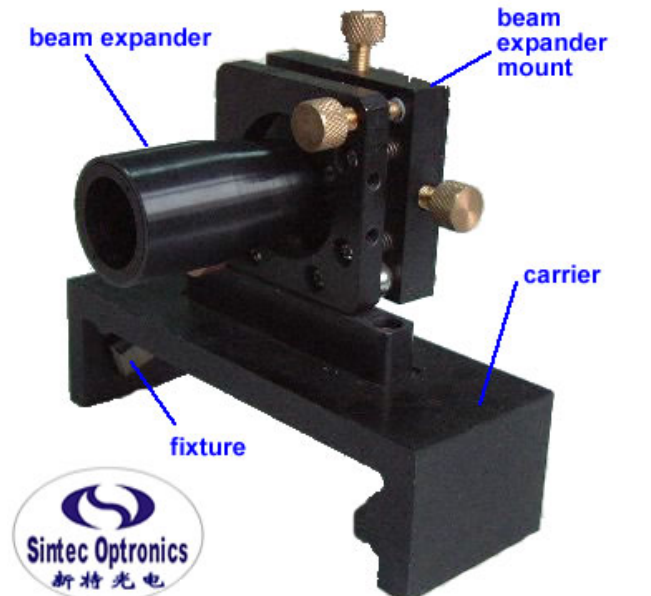


- Diode pump module**
- diode module including YAG rod
 - carrier & fixture



- Resonator modules**
including output mirror module and rear mirror module
- output coupler (or rear mirror)
 - mirror mount
 - carrier & fixture

Remark: prepared for default mirror dimension of D20x5mm. Other available upon request.

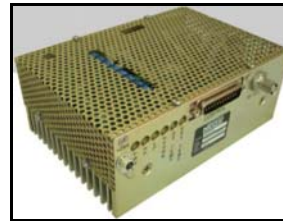
 <p>The image shows a Q-switch module assembly. It consists of a silver-colored metal Q-switch mounted on a black metal Q-switch base, which is further mounted on a black metal carrier. Two blue cables are connected to the side of the Q-switch. Red lines with labels point to the 'Q-switch', 'Q-switch base', and 'carrier'. A circular logo for Sintec Optronics (新特光电) is located in the bottom left corner of the image area.</p>	<p>Q-switch module</p> <ul style="list-style-type: none"> ● Q-switch ● Q-switch base ● Carrier & fixture
 <p>The image shows an aperture module assembly. It features a white circular aperture mounted on a black metal aperture mount, which is secured to a black metal carrier by two brass screws. The carrier is mounted on a black metal fixture. Blue lines with labels point to the 'aperture', 'aperture mount', 'carrier', and 'fixture'. A circular logo for Sintec Optronics (新特光电) is located in the bottom left corner of the image area.</p>	<p>Aperture module</p> <ul style="list-style-type: none"> ● Aperture ● aperture mount, ● carrier & fixture. <p>Remark: default aperture diameter is 1.5mm.</p>
 <p>The image shows a beam expander module assembly. It includes a black cylindrical beam expander mounted on a black metal beam expander mount, which is secured to a black metal carrier by two brass screws. The carrier is mounted on a black metal fixture. Blue lines with labels point to the 'beam expander', 'beam expander mount', 'carrier', and 'fixture'. A circular logo for Sintec Optronics (新特光电) is located in the bottom left corner of the image area.</p>	<p>Beam expander module</p> <ul style="list-style-type: none"> ● Beam expander ● beam expander mount ● carrier & fixture.

		<p>Red pointer module</p> <ul style="list-style-type: none"> ● red diode laser & diode holder ● beam expander mount ● carrier & fixture.
		<p>Mechanical parts</p> <ul style="list-style-type: none"> ● carrier & fixture
		<p>Mechanical parts</p> <ul style="list-style-type: none"> ● cover <p>Remark: default cover length is 682mm.</p>
		<p>Mechanical parts</p> <ul style="list-style-type: none"> ● laser base ● front plate ● rear plate <p>Remark: default base length is 672mm.</p>

(2) Q-switch Driver



19" panel QSD series drivers



N390 series drivers

(3) Diode Driver



The panel is standard 19 inch.

(4) Control Cabinet

Used to mount key board, Q-switch driver, computer, lamp driver (or diode driver) and electrical controller. The electrical controller is used in YAG laser markers.

