



Nano DP

OEM Industrial Ultra Compact 200Hz Diode Pumped Q-switched Pulsed Nd:YAG Lasers

KEY MODELS

Nano DP 100 & 200

Single wavelength output laser system operating at 100Hz or 200Hz.

Harmonic generation modules for 532nm, 355nm, 266 or 213nm with dichroic separation.

Optional mortised optical attenuator for 1064nm. (>1000steps)

Nano DP -MOA

Multiple wavelength (1064nm, 532nm, 355nm and 266nm on same axis) output laser system operating at 100Hz or 200Hz.

Integrated 1064nm motorised variable optical attenuator (>1000 steps)

Dedicated design for FPD and multi-wavelength micro-milling and laser processing workstations.

- **Compact aluminium monolithic laser head**
- rugged and sealed from contamination.
- **Diode pumped Nd:YAG laser**
- reliable and stable with no consumables.
- **Air cooled**
- no water, low maintenance and simple integration.
- **EO Q-switched**
- accurate ultra short pulses and high peak energy.
- **Microprocessor controlled**
- continuous monitoring and status feedback.
- **Integrated electronics and Q-switch driver**
- 2U Control and DC power tray.
- **Sealed harmonics**
- 532nm, 355nm, 266nm and 213nm options.
- **Easy control**
- touchscreen or PC based user interfaces.

TECHNICAL DATA

MODEL	Nano DP 80-100 Single λ Output	Nano DP 100-MOA Multi λ Ouput ⁽¹⁾	Nano DP 40-200 Single λ Output	Nano DP 200-MOA Multi λ Ouput ⁽¹⁾
Repetition Rate (Hz)	1 - 100	1-100	1-200	1-200
Output Energy (mj) ⁽²⁾				
1064nm	80	>15	40	>10
532nm	40	>15	20	>10
355nm	12	>8	6	>5
266nm	6	>4	2	>1
Pulse Stability ($\pm\%$)				
1064nm	1	1	1	1
532nm	1	1	1	1
355nm	2	2	2	2
266nm	4	4	4	4
Parameter				
Beam diameter (mm)	3	3	2.5	2.5
Beam divergence (mrad) ⁽³⁾	<7	<7	<7	<7
M ² @ 1064nm	<3.5	<3.5	<3.5	<3.5
Pulse length @1064nm (ns)	7 ~ 9	7 ~ 9	7 ~ 9	7 ~ 9
Pointing stability (μ rad) ⁽⁴⁾	<70	<70	<70	<70
Timing jitter (ns) ⁽⁵⁾	<0.5	<0.5	<0.5	<0.5
Diode Life (pulses) ⁽⁶⁾	> 1 Billion	> 1 Billion	> 1 Billion	> 1 Billion
Services				
Voltage (VAC)	200-250	200-250	220-250	220-250
Frequency (Hz)	50-60	50-60	50-60	50-60
Power phase	Single	Single	Single	Single
Cooling	Air Cooled ⁽⁷⁾	Air Cooled ⁽⁷⁾	Air Cooled ⁽⁷⁾	Air Cooled ⁽⁷⁾
Operating ambient ($^{\circ}$ C)	10 - 35	10 - 35	10 - 35	10 - 35
PSU Type	2U 19" Rackmount	2U 19" Rackmount	2U 19" Rackmount	2U 19" Rackmount

(1) All wavelengths output in single beam - no dichroic separation included.

(2) At maximum frequency.

(3) Full angle for 90% of the output energy @ 1064nm.

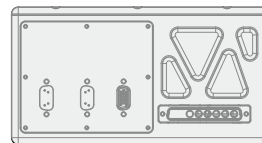
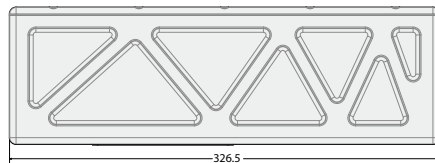
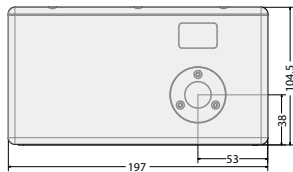
(4) Full angle 1064nm.

(5) Measured with respect to the Q-switch trigger input.

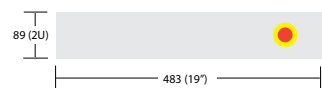
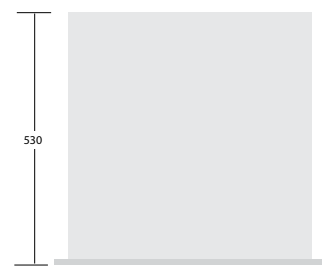
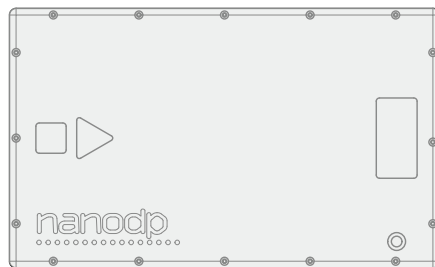
(6) Typical @ max. output.

(7) Base plate cooling - optional external water base plate.

MECHANICAL DATA



All dimensions in mm.



Our policy is to improve the design and specification of our products. The details given in this document are not to be regarded as binding.

HEAD OFFICE
Litron Lasers Ltd
 8 Consul Road
 Rugby
 Warwickshire CV21 1PB
 England

T +44 (0)1788 574444
 F +44 (0)1788 574888
 E sales@litron.co.uk

NORTH AMERICAN OFFICE
Litron Lasers North America
 2449 Arnica Drive
 Bozeman
 MT 59715
 USA

T +1 (406) 522 7566
 F +1 (406) 522 7567
 E sales@litronlasers.com

 **Litron Lasers**
www.litronlasers.com