


THE VALUE OF PERFORMANCE.
NORTHROP GRUMMAN

Long Pulse Width Array

>0.5 ms Long Pulse Operation



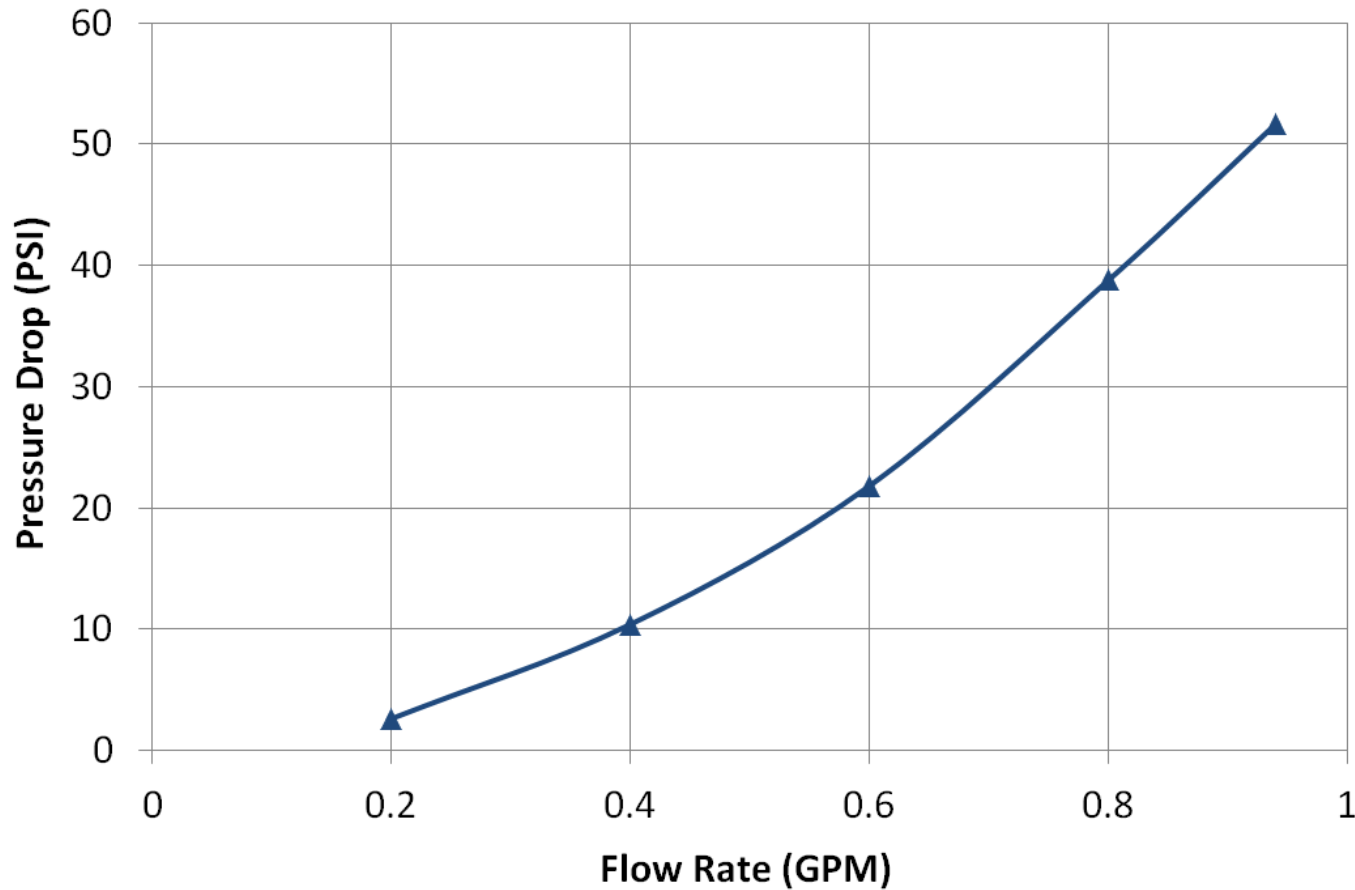
Northrop Grumman – Cutting Edge Optronics
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- **Vertical stack size: 1 to 12 bars**
 - **Vertical pitch: 1.65 mm**
 - **Wavelength: 790 nm - 950 nm**
 - **Up to 150 Watts per bar**
 - **Up to 300 ms pulse duration**
- 
- 2 Dimensional**
Array Options Available
- **Two-dimensional arrays available (1-12 x N)**
 - **These arrays are cooled using standard, filtered water (deionized water is not required)**
 - **All critical bonds in the arrays are made with AuSn solder ('hard solder')**

Custom arrays available upon request

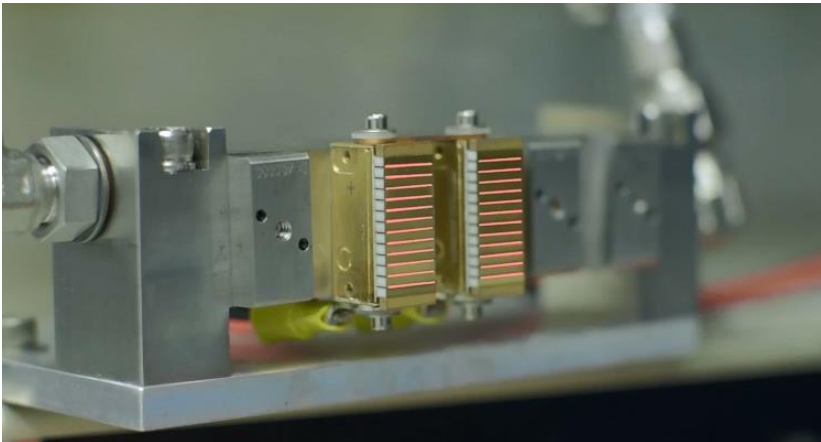
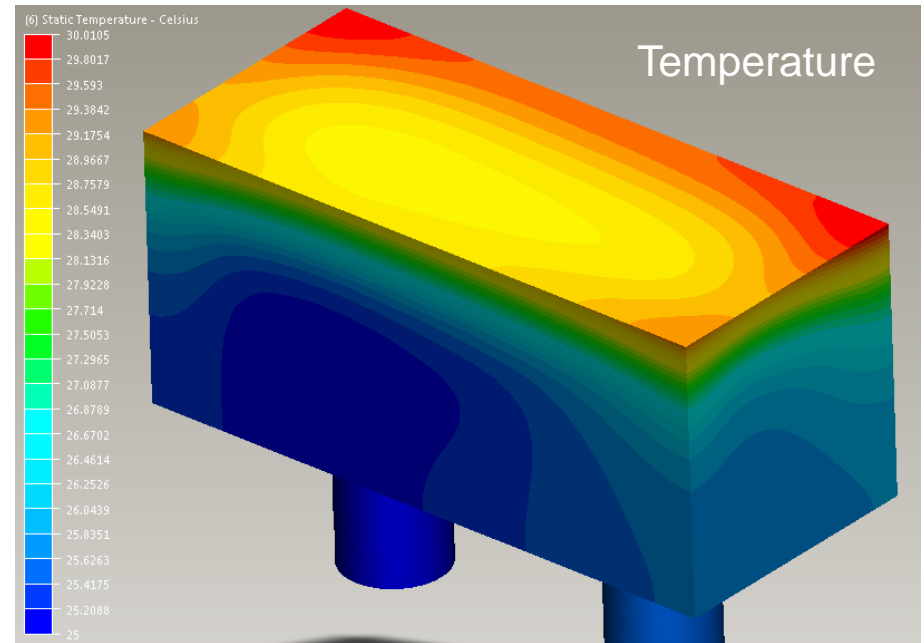
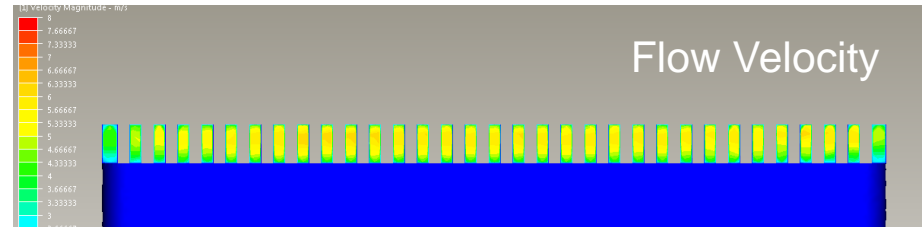
Pressure Drop (PSI) vs. Flow Rate (GPM)

Pressure Drop (PSI) vs. Flow Rate (GPM)



HEX can be designed for system level pressure / flow requirements

- LDA heat exchanger designed to uniformly cool the laser diode bars during operation.
 - Results in increased reliability.
- LDA design can be customized to meet customer requirements.
 - Different size/shape
 - System-level pressure/flow requirements



Uniform coolant flow creates uniform heat distribution

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