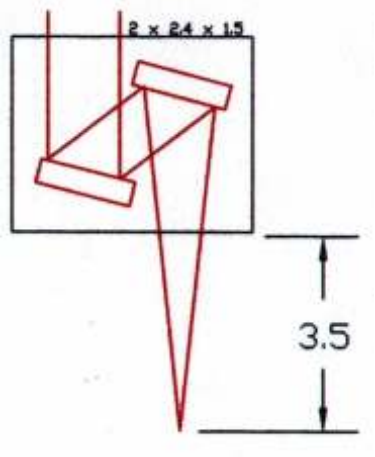
HIGH POWER FOCUSING SYSTEM

PRODUCT SHEET

SPAWR INDUSTRIES

RUGGED-LONG LIFE

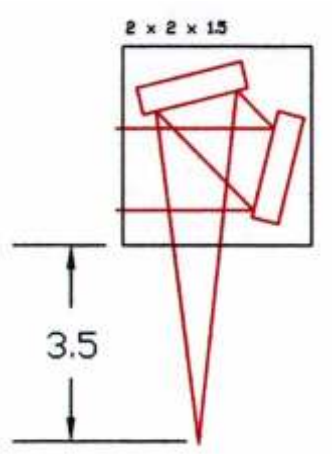


POWER RATING CO_2
1 KW CW with conductive cooling

INPUT APERTURE
0.8" Diameter Max

FOCAL LENGTH
5.0 inches

WORKING DISTANCE
3.5 INCHES



SPAWR's focus modules are specially designed to provide a sharply focused spot of high intensity laser radiation for cutting, welding, heat treating and various research applications. The focused spot will not changed size or shift its location during long high power runs. The all reflective metal mirror system utilizes high volume production techniques with special computer-designed aspheric surfaces. To offer the combined advantage of low cost, easy alignment and long life in harsh environments, SPAWR offers two standard models, a 90 off-axis and a close-packed Z. Both models offer a generous working distance of 3.5 inches. Custom designs are available. Call us for information on standard and custom accessories.

GENERAL INFORMATION:

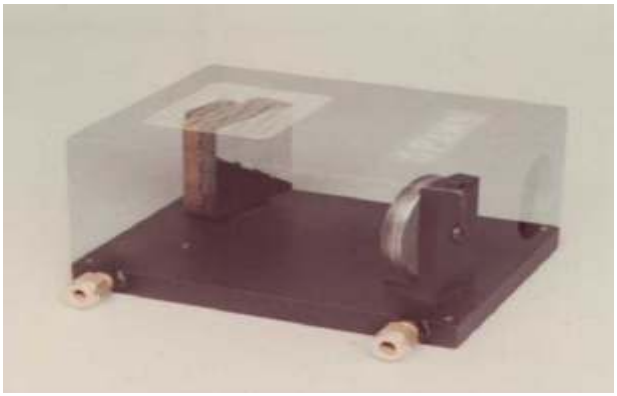
SPAWR is a major supplier of state-of-the-art metal mirrors for use in very high power laser research. The highest quality metal mirrors that have provided the highest CO2 laser damage threshold are provided by SPAWR.

Questions and comments to spawr@spawrindustries.com. Or visit www.spawrindustries.com.
SPAWR Industries, Inc. 2051 Spawr Circle, Lake Havasu City, AZ 86403
PHONE(928) 453-8800 FAX (928) 453-8811

HIGH POWER LASER FOCUS MODULES

PRODUCT SHEET

1”- 1.5”- 3” - 4” Diameter
Water-cooled Focus Modules



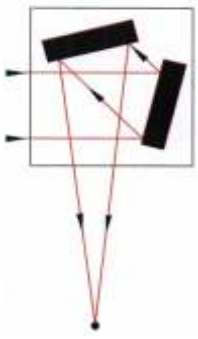
Non-visible water cooling network in standard systems offers freedom of protruding tubes and manifolds

The high reliability that is expected of the SPAWR systems is built into our high power focus modules for heat treating, cladding, free forming, cutting and welding applications. Available in various sizes and power handling capabilities, in both 90 off-axis and close-pack Z configurations. Focal lengths and working distances to accommodate specialized applications. Shield cones, nozzles and air purge systems are also available for every need. Custom designs include integrated profiles, and scan/dither systems up to 50KW.

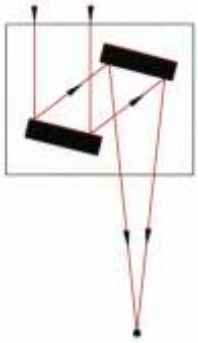
Molybdenum mirrors for high durability.
Non corrosive heat exchangers.
Easy access to mirrors for cleaning.
All metal components

SPAWR can also machine mount holes for your tube flanges and cones. Let us help you select the right module for your specific application. FAX, E-mail or call us with your beam diameter, power, wavelength, F/No required, focus spot size and working distance. SPAWR will furnish you with an envelope drawing of the optimum configuration

90off-axis



Close-pack Z



Model	Aperture	Configuration	Average KW CW
FM90-WC	0.8”	90 off-axis	0.5-10
FM90-Z-WC	0.8”	Z	0.5-10
FM015-WC	1.3”	90 off-axis	0.5-10
FM015-Z-WC	1.3”	Z	0.5-10
FM021-WC	1.6”	90 off-axis	1-14
FM021-Z-WC	1.6”	Z	1-14
FM041-WC	2.5”	90 off-axis	1-25
FM041-Z-WC	2.5”	Z	1-25
FM061-WC	3.5”	90 off-axis	1-50
FM061-Z-WC	3.5”	Z	1-50
FM081-WC	4.0”	90 off-axis	2-50
FM081-Z-WC	4.0”	Z	2-50
FM101-WC	5.0”	90 off-axis	2-50
FM101-Z-WC	5.0”	Z	2-50

[1] Depending on laser power

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