

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Scientech 36-0401* at our website: *Click HERE*

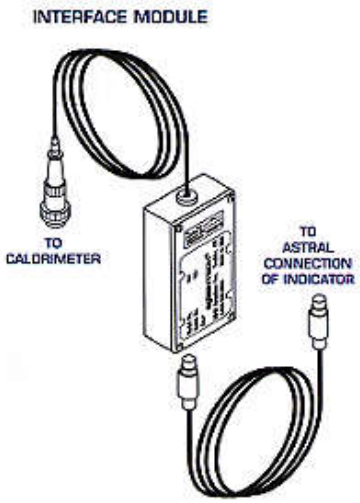
SCIENTECH Web Site

Large Aperature Calorimeters

For large area (diameter) or diverging laser beams, Scientech 100 mm and 200 mm diameter disc calorimeters are ideal. Available in both surface and volume absorbing models, these calorimeters can handle both cw and pulsed lasers with average power levels to 100 watts and peak pulse power fluence levels to 100 GW/cm^2. These calorimeters have found extensive service in scientific research, measuring single pulse energy levels to 1 kilojoule, in measuring laser range finders and Lidar systems, and measuring laser diode arrays and metal vapor lasers. These calorimeters will operate with the Vector indictors with an interface module (see below).







100 mm AND 200 MM DISC CALORIMETER INTERFACE MODULES FOR INDICATORS	
Part Number	Description
10735	Interface Module for 100 mm Calorimeter Hookup to Vector Indicators for power and energy readings up to 30 W, 30 J
10747	Interface Module for 200 mm Calorimeter Hookup to Vector Indicators for power and energy readings up to 30 W, 30 J
10748	Interface Module for 100 mm Calorimeter Hookup to Vector Indicators with 10X electrical attenuator. The indicator will display 1/10 the actual value thereby allowing readings up to the calorimeters maximum power and energy capacities
10769	Interface Module for 200 mm Calorimeter Hookup to Vector Indicators with 10X electrical attenuator. The indicator will display 1/10 the actual value thereby allowing readings up to the calorimeters maximum power and energy capacities

100 mm CALORIMETER SPECIFICATIONS

Model No.	36-0401	38-0401	38-0402	38-4UV5
Type Absorber	Surface	Volume	Volume	Volume
Aperture Size (dia.)	100 mm	100 mm	100 mm	100 mm
Spectral Response	250 nm - 35 µm	400 nm - 1.2 µm	9 µm - 11 µm	190 nm - 360 nm
Average Power[1] (max.)	50 W	50 W	50 W	50 W
Resolution (min.)	10 mW - mJ	10 mW - mJ	10 mW - mJ	10 mW - mJ
Power Density (max.)	200 W/cm^2	See Note 15	4 W/cm^2	See Note 17
Peak Power Density (max.)	1 MW/cm^2	See Note 19	100 MW/cm^2	See Note 21
Single Pulse Energy[1] (max.)	150 J	150 J	150 J	150 J
Energy Density (max.)	See Note 5	See Note 10	4 J/cm^2	See Note 12
Precision	<1%	<1%	<1%	<1%
Accuracy	5%	5%	5%	5%
Response Time[2]	5 seconds	5 seconds	5 seconds	5 seconds
Dimensions (D x L) (cm.)	15.24 x 20.32	15.24 x 20.32	15.24 x 20.32	15.24 x 20.32
Weight (kgs.)	2.72	2.72	2.72	2.72
Indicator Compatibility	S310, S310D H410, H410D	S310, S310D H410, H410D	S310, S310D H410, H410D	S310, S310D H410, H410D

[1] Full illumination of absorber
[2] With indicator in watts mode

Note 5 **Surface Absorbing -**
Models AC2500, AC5000, 36-0401, 36-0801, UC150
Max. J/cm^2 = 1000 x (pulse width)$^{1/2}$ to a maximum of 200 J/cm^2

Note 10 **38-0401 and 38-0801**
For repetitive pulses: 3.7 J/cm^2 @ 1064 nm, 2.9 J/cm^2 @ 532 nm, 1 J/cm^2 @ 355 nm, 20 mJ/cm^2 @ 266 nm
For single pulse: 7 J/cm^2 @ 1064 nm, 5.6 J/cm^2 @ 532 nm, 2.1 J/cm^2 @ 355 nm, 41 mJ/cm^2 @ 266 nm

Note 12 **AC25UV, AC50UV, UC150UV, 38-4UV5, 38-8UV5**
For repetitive pulses: 1.1 J/cm^2 @ 355 nm,
For single pulse: 40 J/cm^2 @ 355 nm

Note 15 **38-0401 and 38-0801**
27 W/cm^2 @ 1064 nm, 21 W/cm^2 @ 532 nm, 7.7 W/cm^2 @ 355 nm, 158 mW/cm^2 @ 266 nm

Note 17 **AC25UV, AC50UV, UC150UV, 38-4UV5,38-8UV5**
50 W/cm^2 @ 355 nm

Note 19 **38-0401 and 38-0801**
90 GW/cm^2 @ 1064 nm, 71 GW/cm^2 @ 532 nm, 27 GW/cm^2 @ 355 nm, 530 MW/cm^2 @ 266 nm

Note 21 **AC25UV, AC50UV, UC150UV, 38-4UV5, 38-8UV5**
For repetitive pulses: 101 MW/cm^2 @ 355 nm
For single pulse: 3.5 GW/cm^2 @ 355 nm

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

200 mm CALORIMETER SPECIFICATIONS

Model No.	36-0801	38-0801	38-0802	38-8UV5
Type Absorber	Surface	Volume	Volume	Volume
Aperture Size (dia.)	200 mm	200 mm	200 mm	200 mm
Spectral Response	250 nm - 35 µm	400 nm - 1.2 µm	9 µm - 11 µm	190 nm - 360 nm
Average Power[1] (max.)	100 W	100 W	100 W	100 W
Resolution (min.)	100 mW - mJ	100 mW - mJ	100 mW - mJ	100 mW - mJ
Power Density (max.)	200 W/cm^2	See Note 15	4 W/cm^2	See Note 17
Peak Power Density (max.)	1 MW/cm^2	See Note 19	100 MW/cm^2	See Note 21
Single Pulse Energy[1] (max.)	300 J	300 J	300 J	300 J
Energy Density (max.)	See Note 5	See Note 10	4 J/cm^2	See Note 12
Precision	<1%	<1%	<1%	<1%
Accuracy	5%	5%	5%	5%
Response Time[2]	5 seconds	5 seconds	5 seconds	5 seconds
Dimensions (D x L) (cm.)	22.86 x 25.4	22.86 x 25.4	22.86 x 25.4	22.86 x 25.4
Weight (kgs.)	7.26	7.26	7.26	7.26
Indicator Compatibility	S310, S310D H410, H410D	S310, S310D H410, H410D	S310, S310D H410, H410D	S310, S310D H410, H410D

[1] Full illumination of absorber
[2] With indicator in watts mode

Note 5 **Surface Absorbing -**
Models AC2500, AC5000, 36-0401, 36-0801, UC150
Max. J/cm^2 = 1000 x (pulse width)$^{1/2}$ to a maximum of 200 J/cm^2

Note 10 **38-0401 and 38-0801**
For repetitive pulses: 3.7 J/cm^2 @ 1064 nm, 2.9 J/cm^2 @ 532 nm,
1 J/cm^2 @ 355 nm, 20 mJ/cm^2 @ 266 nm
For single pulse: 7 J/cm^2 @ 1064 nm, 5.6 J/cm^2 @ 532 nm,
2.1 J/cm^2 @ 355 nm, 41 mJ/cm^2 @ 266 nm

Note 12 **AC25UV, AC50UV, UC150UV, 38-4UV5, 38-8UV5**
For repetitive pulses: 1.1 J/cm^2 @ 355 nm,
For single pulse: 40 J/cm^2 @ 355 nm

Note 15 **38-0401 and 38-0801**
27 W/cm^2 @ 1064 nm, 21 W/cm^2 @ 532 nm,
7.7 W/cm^2 @ 355 nm, 158 mW/cm^2 @ 266 nm

Note 17 **AC25UV, AC50UV, UC150UV, 38-4UV5,38-8UV5**
50 W/cm^2 @ 355 nm

Note 19 **38-0401 and 38-0801**
90 GW/cm^2 @ 1064 nm, 71 GW/cm^2 @ 532 nm,
27 GW/cm^2 @ 355 nm, 530 MW/cm^2 @ 266 nm

Note 21 **AC25UV, AC50UV, UC150UV, 38-4UV5, 38-8UV5**
For repetitive pulses: 101 MW/cm^2 @ 355 nm
For single pulse: 3.5 GW/cm^2 @ 355 nm

Scientech, Inc.
5649 Arapahoe Avenue,
Boulder, Colorado 80303
Phone: (303) 444-1361 1-800-525-0522
Fax: (303) 444-9229
Email: inst@scientech-inc.com

Scientech, Inc manufacturers of analytical balances, top loading balances, electronic balances,

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

precision balances, scales, gem scales, jewelry scales, laser power meters, laser energy meters, calorimeters, pyroelectric detectors, and laser power and energy systems.



Copyright © 1996, 1997, 1998, 1999, 2000 Scientech, Inc.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP