

ANALAB® FluoroPlates

Better Sample Preparation = Better Results!



The complete family of Analab FluoroPlate hotplates – sized for any application.

Sample preparation is a critical step in obtaining accurate results. Analab digestion tools deliver optimal digestion control for trace and ultra-trace analysis in a wide range of applications such as:

- Metallurgy
- Semiconductor
- Nuclear
- Earth & Planetary Sciences
- Environmental
- Pharmaceutical

Modern laboratories demand modern techniques in sample preparation. In the past, hot plates were used to digest samples where common problems involved low throughput, dealing with fragile beakers, cleanliness of glassware, rust and corrosion, cross contamination of digestion system to sample, loss of volatile elements, and poor sample temperature control.

Features & Capabilities

- PFA-coated specialty graphite work surface for maximum resistance to aggressive chemicals
- Uniform temperature across all sample positions (+/- 2 °C)
- Suitable for Class 1 (ISO 3) clean room environments - no contaminants/particulates

Safety

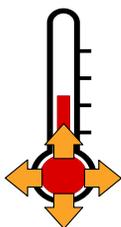
- PTFE thermal protection around all sides and underneath protect users and fume hood surface
- Standard with raised rim to contain spills
- Multiple alarms and electronic/physical temperature safety sensors

Advanced Analab Digestion Features



Acid Inertness

- 400 µm thick PFA coating provides protection from corrosive agents
- Class 1 cleanroom operation



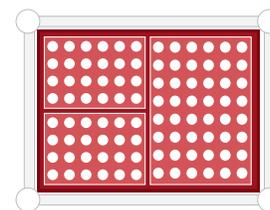
Uniform Temperature

- Stable temperature regulated at $\pm 2^\circ\text{C}$
- 100% of working surface is maintained at set temperature



Long, Maintenance-free Lifetime

- Heating elements in sealed environment
- Controller located outside of digestion area to eliminate corrosion



Numerous Configurations

- Models for different sample volumes
- Modular EasyDigest racks for applications with side and bottom vial heating

FluoroPlate Features

Three Capacity Options

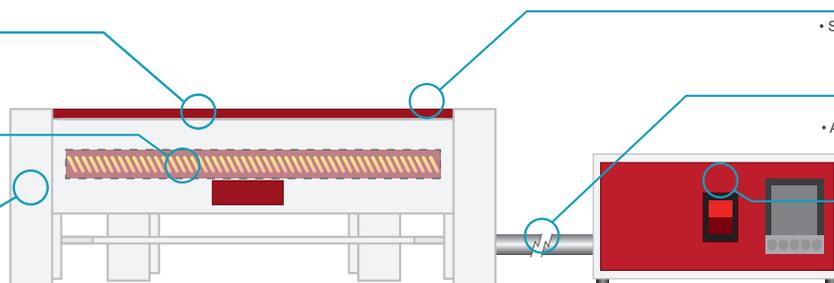
- A4 Plate (small - 20cm x 30cm x 13cm)
- A3 Plate (medium - 30cm x 40cm x 13cm)
- A2 Plate (large - 40cm x 60cm x 13cm)

Heating Element

- Embedded in PFA coated graphite block for inertness

Safety

- PTFE thermal insulation around all sides and underneath for safety
- Protective lip surrounds edge of work surface to protect against spills



Raised Rim

- Standard raised rim around edge to contain spills

External Control

- 1.7m (5.5') PTFE-shielded control cable
- Allows regulator to be located outside fume hood

Temperature Regulator

- 110 or 208-240 V supply
- $\pm 2^\circ\text{C}$ control up to 250°C maximum
- Multiple alarms for maximum safety
- Offered in fully programmable and non-programmable (with timer) versions

FluoroPlate Specifications

	A4 110V	A4 208-240V	A3 110V	A3 208-240V	A2 110V	A2 208V-240V
Model	A4-1V	A4-2V	A3-1V	A3-2V	A2-1V	A2-2V
Footprint LxWxH (cm)	42x29x14	42x29x14	52x39x14	52x39x14	72x49x20	72x49x20
Heated Area LxW (cm)	20x30	20x30	30x40	30x40	40x60	40x60
Weight (kg)	4.5	4.5	9	9	18	18
Temperature Stability (°C)	+/- 2	+/- 2	+/- 2	+/- 2	+/- 2	+/- 2
EasyDigest Rack Capacity	1x A4	1x A4	1x A3, 2x A4	1x A3, 2x A4	4x A4, 2x A3	4x A4, 2x A3
Electrical Requirement	110V/15A	208-240V/15A	110V/15A	208-240V/15A	110V/20A	208-240V/20A
Plug Connector (NEMA)	5-15P	6-15P	5-15P	6-15P	5-20P	6-20P
Max Operating Temp (°C)	250	250	200	250	150	240

All FluoroPlates listed above require an external regulator for use. Regulators are available in different operating voltages and with or without programmable operation

Temperature Regulators

All Analab FluoroPlate modules require an external temperature regulator/controller. Designed for remote location outside the corrosive atmosphere in the fume hood. They are available in 110V and 208-240V versions depending on the power circuits available in your laboratory with either a basic timer/single setpoint or multiple temperature program capability.



Programmable Regulator



Non-programmable Regulator with Timer

Model	Timer	Programmable	Electrical Requirement	NEMA Plug
RNP-1V-15A-T	✓		110V/15A	5-15P
RNP-1V-20A-T	✓		110V/20A	5-20P
RNP-2V-15A-T	✓		208-240V/15A	6-15P
RNP-2V-20A-T	✓		208-240V/20A	6-20P
RP-1V-15A		✓	110V/15A	5-15P
RP-1V-20A		✓	110V/20A	5-20P
RP-2V-15A		✓	208-240V/15A	6-15P
RP-2V-20A		✓	208-240V/20A	6-20P

Also available in dual controller models to provide external temperature probe display or direct control from probe

FluoroPlate Packages

Analab also offers complete kits for the most popular FluoroPlate systems. These kits include a complete turn-key system comprised of:

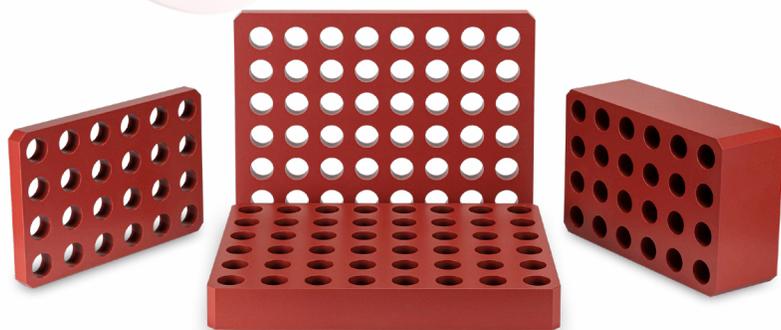
- FluoroPlate (A2, A3, or A4 model)
- Non-programmable regulator with timer for placement outside of the digestion environment. Features single temperature setpoint and shut-off timer.

In addition to the packages listed below, additional configurations are also available upon request.



Packages	A4P-1V	A3P-1V	A2P-2V
FluoroPlate Package	A4 FluoroPlate equipped with non-programmable regulator with timer	A3 FluoroPlate equipped with non-programmable regulator with timer	A2 FluoroPlate equipped with non-programmable regulator with timer
Electrical Requirement	110V/15A	110V/15A	208-240V/20A
Plug Connector (NEMA)	5-15P	5-15P	6-20P
Max Operating Temp (°C)	250	200	240

Modular EasyDigest Racks



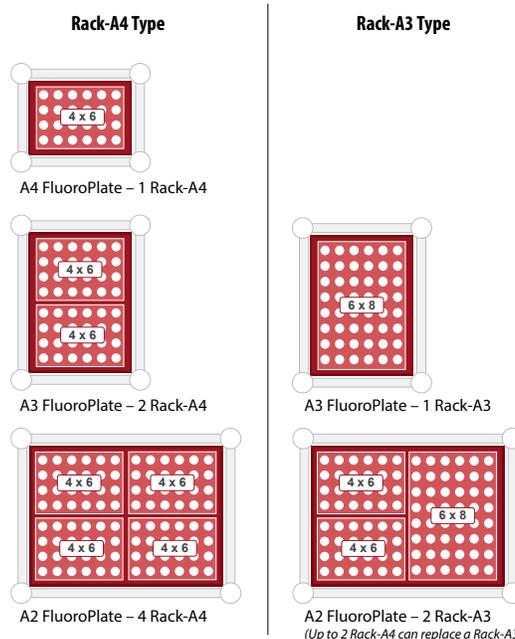
PFA-coated graphite racks - the perfect complement to any FluoroPlate



EasyDigest Racks Feature:

- Using EasyDigest racks on a FluoroPlate delivers uniform temperature from the bottom to the top of the container
 - Minimizes temperature gradients
 - Reduces potential for sample loss
- Completely customizable - racks support almost all sample digestion containers
 - Small sample vials
 - Bottles
 - Test tubes
- Compatible with A2, A3 and A4 FluoroPlates

FluoroPlate and Modular EasyDigest Rack Configurations



EasyDigest Rack Specifications

EasyDigest Rack Size/Type	Model	Rack Height (mm)	# Vial Positions	Vial Opening ID (mm)	Recommended Vial OD (mm)
A4 (7 mL vessels)	EDR-A4-24-7mL	22	24	23	22
A4 (15 mL vessels)	EDR-A4-24-15mL	22	24	31	30
A4 (30 mL vessels)	EDR-A4-24-30mL	50	24	31	30
A4 (50 mL vessels)	EDR-A4-24-50mL	79	24	31	30
A3 (7 mL vessels)	EDR-A3-70-7mL	22	70	23	22
A3 (15 mL vessels)	EDR-A3-48-15mL	22	48	31	30
A3 (30 mL vessels)	EDR-A3-48-30mL	50	48	31	30
A3 (50 mL vessels)	EDR-A3-48-50mL	79	48	31	30